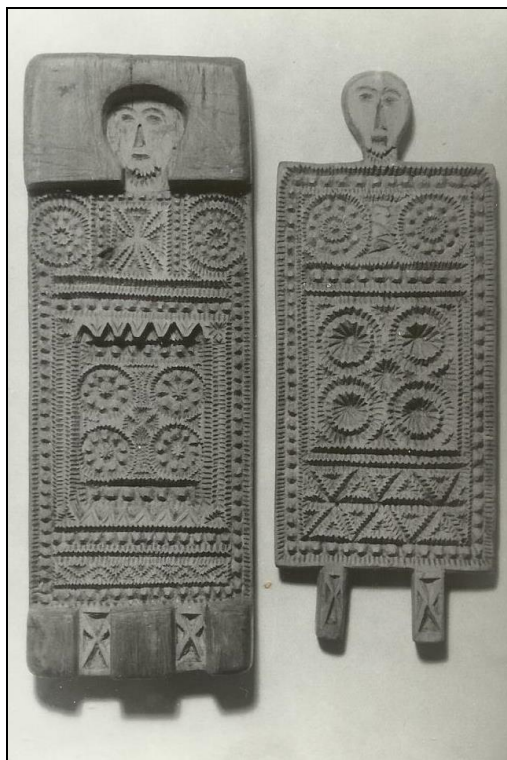


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# ANNUAIRE ROUMAIN D'ANTHROPOLOGIE

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This issue is dedicated to the anniversary of 80 years since the inauguration of  
Francisc Rainer Institute of Anthropology in Bucharest (20 June 1940)

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## **Main cover image:**

*Tipar de caș / “Păpușar”* [Anthropomorphous wooden cheese-mould] from  
Sohodol-Bran (Brașov county), 1882 (Collection and copyright: Gheorghîță Geană)

RELEVANT CRANIOFACIAL INDICES IN THE  
MORPHOTYOLOGICAL ASSESSMENT OF A BRONZE  
AGE HUMAN GROUP FROM CÂNDEȘTI  
(VRANCEA COUNTY, ROMANIA)

MARIANA POPOVICI<sup>1</sup>, OZANA-MARIA PETRARU<sup>1,2</sup>,  
LUMINIȚA BEJENARU<sup>1,2,\*</sup>, VASILICA-MONICA GROZA<sup>1</sup>

The correlation of craniofacial indices is essential in the assessment of facial typologies, sexual dimorphism, inter- and intra-population phenotype variations, congenital deformities, being an important approach in dentistry, plastic surgery, forensic anthropology and paleoanthropology.

This study is aimed to assess the craniofacial indices and their role in morphotype definition. The osteological material analysed in this paper was discovered in the necropolis of Cânduști (Vrancea County, Romania) dating to Bronze Age (Monteoru Culture, 1550–1300 BC). Multivariate analysis was performed on 13 craniofacial indices. Principal Components Analysis (PCA), used as an exploratory tool, highlights variation models attributed to some morphotypes. To evaluate the significance of the main traits of difference between morphotypes, the Multivariate Analysis of Variance (MANOVA) and the Canonical Variates Analysis (CVA) were applied.

According to our results, the function between total facial index and the orbital index seems to be the best indicator in description of the skull typology, with an accuracy of 80%. Morphological subtypes were also highlighted on the basis of these indices. Insignificant contributions in distinguishing typologies have the cranial indices.

**Keywords:** craniofacial indices, morphotypes, multivariate statistics, Bronze Age, Cânduști (Romania).

INTRODUCTION

The human skull is a complex and highly integrated structure. The knowledge of craniofacial indices and correlation between them is essential in issues such as: facial typologies, sexual dimorphism, intra- and interpopulational variations, but also

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facial trauma and congenital deformities. Therefore, the craniofacial variability has always been a topic of interest for palaeoanthropology, dentistry, plastic surgery and forensic anthropology (Ghosh and Malik 2007; Golalipour 2006; Maalman *et al.* 2019; Martínez-Abadías *et al.* 2012; Raji *et al.* 2010; Shrestha *et al.* 2019). Morphological phenotype is the product of a hereditary basis modified by environmental modulation in unknown proportions (Cavalli-Sforza and Bodmer 1999).

The discovery and the excavations of the great necropolis from Căndești (Vrancea County, N45.539172, E27.073576) (Figure 1) were carried out between 1968–1982, being conducted by the archaeologist Florescu Marilena (Florescu and Florescu 1983). The necropolis was dated as belonging to the Monteoru culture (1550–1300 BC), considered as one of the most representative ethnic groups of the Bronze Age (Miu 1999). Besides a rich archaeological material discovered, over 400 human skeletons were found. A paleodemographic and morphometrical analysis of this material has been realised by Georgeta Miu in her PhD Thesis (Miu 1999). Thus, the author identified a typological polymorphism as follows: the Mediterranean type represents the main fund in this group (41%), followed by the Proto-Europoid (34%), the Nordoid type (21%). For 4% of the group, the typological profile could not be determined (Miu 1999).

The present study is a new contribution to the knowledge of craniofacial variability by multivariate statistics, to improve the data related to the evolution of different human populations in Bronze Age.

## MATERIAL AND METHODS

Unfortunately, the human skeletons from Căndești are in a poor state of conservation, which made the morphometric analysis difficult. Given the high degree of degradation because of the improper preservation, only a small part of this osteological material was used in the present research. Therefore, a sample consisting of metric data from 40 skulls was subjected to statistical analysis. Data on age at death, sex and typology were taken from the paleoanthropological analysis achieved by Miu (1999). In this research 13 indices were calculated according to Martin (1928), and El-Najjar and McWilliams (1978). These indices were grouped as follows: cranial indices – cranial index (8/1), porio-bregmatic longitudinal index (20/1), porio-bregmatic transversal index (20/8), frontal-parietal index (9/8), parietal-occipital index (12/8); facial indices – frontal-transversal index (9/10), facial superior index (48/45), orbital index (52/51), nasal index (54/55), total facial index (47/45), fronto-jugal index (9/45), gonio-jugal index 66/45; skull index – cranial-facial transversal index (45/8).

In order to avoid the errors of craniometric interpretation and characterization, a series of tests have been applied first, such as: the Grubs's test, applied to correct

the measurement errors (Grubbs 1969; Stefansky 1972); the Kolmogorov-Smirnov test for normality of data.

First basic descriptive statistics were calculated for all variable in both sexes. The differences between males and females were carried out by using independent  $t$  test. The confidence limit was considered 0.95, and the value of  $p$  smaller than 0.05 was considered as statistically significant value.

Principal Components Analysis (PCA) was used as a method to reduce the number of variables in a dataset and to get the linear sequences of those variables that explain most of the variability (Slaus et al. 2004).

The patterns of the morphotypes were analyzed with MANOVA (Multivariate Analysis of Variance) and CVA (Canonical Variates Analysis). The null hypothesis of the equality between the type means is tested using Hotelling's T2 test (Hammer et al. 2001).

All statistical tests were conducted using Paleontological Statistics Software Package, PAST 2.17c (Hammer et al. 2001) and Excel (Office 365).



Fig. 1. Location of the necropolis in Vrancea County, Romania (a); detail (b)  
(Source: <http://ran.cimec.ro/>).

## RESULTS

According to the Kolmogorov-Smirnov test, the normality of the data distribution is not rejected ( $p > 0.05$ ), which indicates the use of parametric tests in the following analyses. Descriptive statistics was performed for each variable separated for both males and females. The  $t$  test indicated that there were no significant differences between the mean of variables of the two sexes ( $p > 0.05$ ) and this made possible to pool the data from the two sexes. A summary statistics for all craniofacial indices of the studied population is shown in Table 1.

Noteworthy is the greater variability for facial indices, as opposed to cranial indices, except for the 66/45. The indices 52/51, 54/55 and the mandibular index

(66/45) have a CV% larger than 10, while the cranial indices 20/8, 9/8, 12/8 manifest a small variability (CV% about 5). The coefficient of variation (CV%) might indicate the influence of these indices in defining morphotypes, and the multivariate analysis is focused on this hypothesis.

Table 1

Descriptive analysis for variables

| No. | Variables | Index |       |        |       |      |       |      |       |
|-----|-----------|-------|-------|--------|-------|------|-------|------|-------|
|     |           | N     | Min   | Max    | M     | SE   | Var   | SD   | CV%   |
| 1   | 8/1       | 33    | 62.38 | 83.06  | 75.05 | 0.91 | 27.63 | 5.26 | 7     |
| 2   | 20/1      | 36    | 56.93 | 70     | 62.94 | 0.55 | 10.78 | 3.28 | 5.22  |
| 3   | 20/8      | 29    | 76    | 92.65  | 83.49 | 0.78 | 17.59 | 4.19 | 5.02  |
| 4   | 9/10      | 37    | 75    | 95.24  | 81.74 | 0.73 | 19.8  | 4.45 | 5.44  |
| 5   | 9/8       | 31    | 64.79 | 79.17  | 70.67 | 0.62 | 12.05 | 3.47 | 4.91  |
| 6   | 12/8      | 29    | 70.75 | 86.51  | 77.85 | 0.72 | 15.23 | 3.9  | 5.01  |
| 7   | 47/45     | 32    | 76.19 | 100    | 85.87 | 1.16 | 42.74 | 6.54 | 7.61  |
| 8   | 48/45     | 35    | 45.89 | 61.9   | 51.99 | 0.74 | 19.1  | 4.37 | 8.41  |
| 9   | 52/51     | 35    | 60.78 | 97.14  | 79.04 | 1.44 | 72.98 | 8.54 | 10.81 |
| 10  | 54/55     | 35    | 39.29 | 63.46  | 50.3  | 0.86 | 26.03 | 5.1  | 10.14 |
| 11  | 45/8      | 30    | 80.27 | 104.96 | 93.37 | 1.07 | 34.17 | 5.85 | 6.26  |
| 12  | 9/45      | 34    | 65.79 | 86.36  | 75.75 | 0.76 | 19.84 | 4.45 | 5.88  |
| 13  | 66/45     | 35    | 31.25 | 46.88  | 38.64 | 0.78 | 21.34 | 4.62 | 11.95 |

Abbreviations: N – number of examined bones; Min – minimum value; Max – maximum value; Mean – mean value; SD – Standard deviation; CV% – coefficient of variation; abbreviations for variables are detailed in text.

The PCA performed on the entire sample including all the craniofacial indices has detected 13 PCs. The principal components (PCs) are linear combinations of the original variables (indices) weighted by their contribution to explaining the variance. The first two PCs define more than 50% of the total variability. Eigenvalues and percentage of explained variability are represented in Tables 2 and 3, whereas the specimens plotted on the first two axes and variables associated with each factor axis are shown in Figure 2.

The individuals with predominantly Mediterranean features migrate to the upper right quadrant, and those with dominant Proto-Europoid features migrate in the lower left quadrant. Liable for this distribution are the variables with loading values greater for PC1 (52/51 and 47/45) and 48/45 and 47/45 for PC2. Positive values of PC1 are related to medium and narrow square orbits (mesochonc and hypsiconch types) and are correlated with Mediterranean typologies, while negative values of PC1 are correlated with chamaeconch type (wide orbits). In particular, positive scores of PC2 are related to specimens having hyper-euryprosopic and euryprosopic faces (47/45 < 84.9).



Table 2

Principal component axes, eigenvalues and percent variation of PCA

| PC | Eigenvalue | % variance |
|----|------------|------------|
| 1  | 99.4294    | 29.998     |
| 2  | 66.141     | 19.955     |
| 3  | 40.1423    | 12.111     |
| 4  | 28.0229    | 8.4545     |
| 5  | 23.2979    | 7.0289     |
| 6  | 21.5074    | 6.4888     |
| 7  | 18.6208    | 5.6179     |
| 8  | 14.9396    | 4.5072     |
| 9  | 6.8287     | 2.0602     |
| 10 | 6.11748    | 1.8456     |
| 11 | 4.54967    | 1.3726     |
| 12 | 1.27291    | 0.38403    |
| 13 | 0.58699    | 0.17709    |

Table 3

Loading values indicating the variables associated with the first two PC axes

| INDEX | PC 1  | PC 2  |
|-------|-------|-------|
| 8/1   | 0.32  | -0.20 |
| 20/1  | 0.15  | -0.13 |
| 20/8  | -0.15 | 0.07  |
| 9/10  | -0.24 | 0.02  |
| 9/8   | -0.21 | -0.03 |
| 12/8  | 0.06  | 0.01  |
| 47/45 | -0.17 | 0.63  |
| 48/45 | -0.03 | 0.45  |
| 52/51 | 0.79  | 0.12  |
| 54/55 | -0.11 | -0.27 |
| 45/8  | -0.29 | -0.38 |
| 9/45  | -0.05 | 0.28  |
| 66/45 | -0.05 | 0.15  |

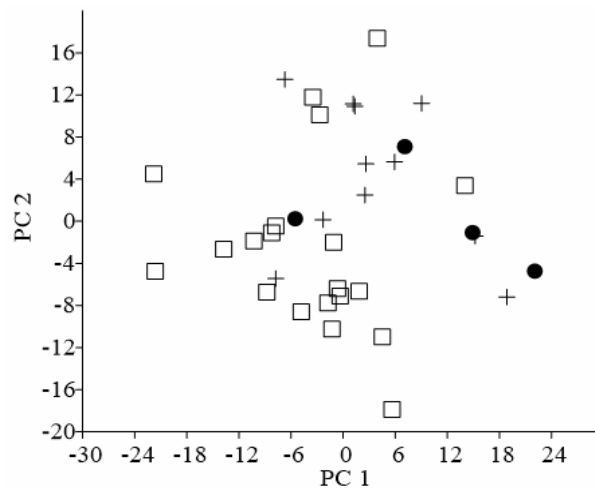


Fig. 2. Plots of PCA: □ Proto-Europoid type; + Mediterranean type; • unidentified typology.

Because the specimens unidentified of typological point of view show a large overlap with the two morphotype, CVA was performed to confidently determine if they belong to one of the two morphotypes. Therefore, 3 priori morphotypes were considered: Proto-Europoid, Mediterranean and Unidentified.

The MANOVA and CVA are focused on the three indices which resulted as relevant in the graph of the PCA distribution.

Multivariate analysis (MANOVA) and the associated Hotelling's  $t^2$ -test suggest significant differences between the Proto-Europoid type and the other two types (Mediterranoid and Unidentified).

No significant differences between the Unidentified type and the Mediterranean type were revealed (Table 4). 80% of total specimens were correctly assigned to their a priori morphotypes, which are significantly separated (Wilk's Lambda 0.4; F test 4.726;  $p < 0.001$ ).

Table 4

Hotelling's  $t^2$  results

| Morphotype     | Proto-Europoid | Mediterranoid | Unidentified |
|----------------|----------------|---------------|--------------|
| Proto-Europoid |                |               |              |
| Mediterranoid  | 0.000902*      |               |              |
| Unidentified   | 0.016398*      | 0.3801        |              |

\*significant difference.

The plot of CV1 and CV2 is presented in Figure 3 and 100% of group variation was accounted for these canonical axes. It shows the clear distinction between the individuals with predominant Proto-Europoid features and those with Mediterranean features. The individuals with unidentified typology probably belong to the Mediterranean morphotype as is indicated by the results of the canonical analysis. The function of 47/45 and 52/51 is the main responsible for this distribution of data on the graph (Figure 3).

Table 5

Loading values of variables associated with CVA axes

| 0     | CV1      | CV2      |
|-------|----------|----------|
| 47/45 | 0.16006  | -0.06387 |
| 48/45 | 0.036761 | -0.12524 |
| 52/51 | 0.12909  | 0.06551  |

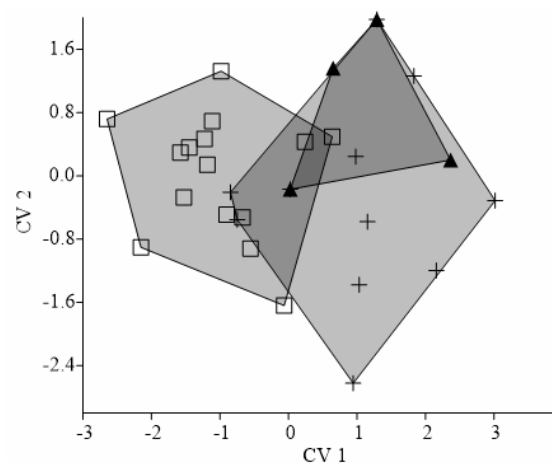


Fig. 3. Morphotypes plotted on CV1 and CV2: □ Proto-Europoid type; + Mediterranean type; ▲ unidentified typology.

By reordering the data, according to the a-priori morphotypes, significant differences were obtained for the mean of the same two facial indices: 47/45 and 52/51. Concerning the total facial index, euryprosopic face characterises the Proto-Europoid type, while the mesoprosopic to leptoprosopic features are specific to the Mediterranean type (Table 6). Related to these two indices (i.e. 52/51 and 47/45), subpatterns were highlighted within each group (Figure 4). The mean of the orbital index is 74.47 in the Proto-Europoid type – corresponding value for camechonc, and respectively 81.54 in the Mediterranean type – corresponding value for mesochonc.

Table 6

Mean/Standard error of the discriminant indices in Proto-Europoid and Mediterranean morphotypes

| Index | Proto-Europoid<br>(Mean/Std. error) | Mediterranoid<br>(Mean/Std. error) | T test          |
|-------|-------------------------------------|------------------------------------|-----------------|
| 47/45 | 83.11/1.8                           | 89.14 / 1.8                        | F 1.7; p 0.009* |
| 52/51 | 74.47 /1.7                          | 81.54/ 2.7                         | F 1.73; p 0.03* |

\* significant difference.

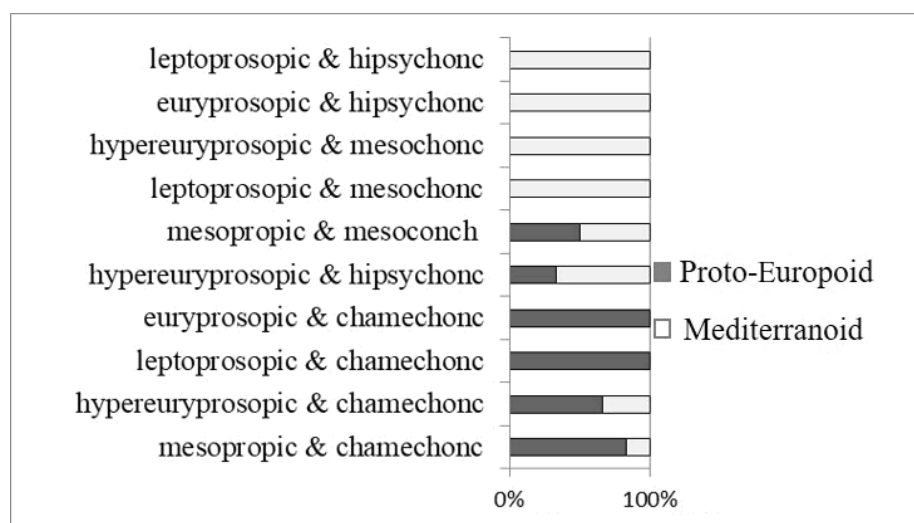


Fig. 4. Morphological subpatterns in the studied human group.

## DISCUSSION

Many craniometric variables are intercorrelated and have a discriminant role in sexual dimorphism, age, populational variability, ethnicity and ancestry estimation (Evereklioglu et al. 2002; Igbigbi and Ebite 2010; Kaur et al. 2012; Lal et al. 2016; Patil 2015; Popovici et al. 2019). Unlike other researches, in this paper, the descriptive

analysis performed separately for each sex does not reveal significant statistical differences between them. This is explained by the data used. We preferred to use only indices, and not variables consisting of raw metric data. By using raw metric data, the sexual dimorphism is evident. To use the indices in the characterization of morphotypes, and not the raw values of measurements, is more relevant in the anthropometric studies. Calculating indices leads to data standardization, eliminating small measurement errors, and more than that, the integrated structures are highlighted. In our research, the craniofacial indices perform functions that define characteristics of two morphotypes: Proto-Europoid and Mediterranean. Similar results were obtained in a previous study, in which it is demonstrated that facial indices have an essential role in differentiating the cranial morphotypes in medieval human groups (Popovici *et al.*, 2019).

Multivariate analysis reveals the importance of two facial indices in defining some typological characteristics: facial or jugal index (47/45) and orbital index (52/51). The cranial indices have insignificant contributions in distinguishing typologies.

The total facial index (47/45) defines the relation between the facial height and the maximum facial breadth; it was used in other studies to describe the facial proportion and it indicates the direction of growth of craniofacial complex (Dodangheh *et al.* 2018; Jeremiah *et al.* 2013; Kataria *et al.* 2015; Kumari *et al.* 2015; Saini *et al.* 2017; Tsunori *et al.* 1998).

The orbital index (52/51) represents the proportion of the orbit height to its breadth multiplied by 100; it is determined by the face shape and it is influenced by intrinsic and extrinsic factors. The variability of orbital region was demonstrated in many studies, as being directly associated with geographic locations and periods in evolution (Jeremiah *et al.* 2013; Kumar and Nagar 2014; Mekala *et al.* 2015; Rao and Pramila Padmini 2014; Sangvichien *et al.* 2017).

The results of the discriminant analysis show that the total facial index and the orbital index distinguished with an accuracy over 80% between morphotypes with predominant Proto-Europoid and Mediterranean features.

In the morphotype with predominant Proto-Europoid features, there are specimens with hypereuryprosopic ( $\leq 79.9$ ) and euryprosopic faces (80–84.9) meaning short and mid-face facial skeleton. The values of the orbital index indicate for this type wide orbits (camechonic type). According to Patnaik *et al.*, 2001, the orbits are included in microseme class (small) and would correspond to the Africans (Patnaik *et al.* 2001).

The specimens with predominant Mediterranean features are defined by high facial skeleton: leptoprosopic (90–95.9) and hyperleptoprosopic ( $> 95$ ) faces, long and narrow neurocranium, oval orbit (or a more rectangular shape), narrow forehead. Giving to classification of Patnaik and collaborators, the orbits are included in mesoseme class (intermediate), although they are in the lower limit of the class rank (Patnaik *et al.* 2001).

Each morphotype is represented by several subtypes that differ in frequency from population to population. In the Bronze Age group from Căndești, the mesopropic and chameconch subtypes are representative in the Proto-Europoid type (38% of total group), and in the Mediterranean type the hypereuryprosopic and mesochonc subtypes are more representative (22% of the group) (Figure 4).

## CONCLUSIONS

This study is a new contribution to the knowledge of the human craniofacial variability, which could advance the knowledge related to the evolution of the different Bronze Age populations.

Although the traditional morphometrics are less and less used in the paleoanthropological studies, in the favour of other modern but more expensive approaches, our results show that the linear measurements still allow complex typological characterizations to phenotypical assessment. Applied multivariate analysis emphasizes the craniofacial indices which have a greater loading in the characterization of the human skull typologies. Of all 13 craniofacial indices that were studied, only the orbital and facial indices revealed functions in the discrimination between Proto-Europoid and Mediterranean morphotypes. Morphological subtypes were also highlighted on the basis of these two indices. The cranial indices have an insignificant contribution in distinguishing morphotypologies.

## ACKNOWLEDGEMENTS

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# MICROTAPHONOMY OF ARCHAEOLOGICAL NON-SKELETAL HUMAN REMAINS – MINI REVIEW OF MICROSCOPIC METHODS

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Microtaphonomy is an important research field related to bioarchaeology (e.g. paleoanthropology, archaeozoology), forensic investigations, and it aims at the investigations of post-mortem changes at microstructural level. Although the amount of scientific papers on the taphonomy of human skeletal remains has increased in the last decades, a limited attention has been addressed to the microtaphonomy of archaeological soft tissues. This paper highlights the importance of such a topic and presents microscopic methods and techniques applied in the taphonomical research of human brain, hairs and other soft tissues discovered in archaeological contexts. We provide an integrated and synthesized review of the current research regarding the histotaphonomy of human non-skeletal remains. This study is addressed mainly towards paleoanthropologists, palaeohistologists as well as forensic researchers and archaeologists.

**Keywords:** microtaphonomy, soft tissues, archaeological human remains, microscopy.

## INTRODUCTION

Taphonomy is a key approach to assessing preservation degree and post-mortem changes in organisms. *Microtaphonomy* or *Histotaphonomy* aims to description, quantification and interpretations of taphonomic processes on microstructural level (Bell 2011; Brönnimann et al. 2018). This area of research has become an important niche in paleoanthropology, being also connected and integrated with funeral archaeology. It is known that the archaeological human remains are largely represented by bones and teeth (Brothwell 1981). The bone and teeth histotaphonomy research has begun with the study of Wedl in 1864 (Jans 2014), and in the last decades more scientific studies were focused on the microtaphonomy of human archaeological mineralized tissues (Jans et al. 2004; Bell and Elkerton 2008; Turner-Walker and Jans

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2008; Brönnimann et al. 2018). The skeletal human remains are histotaphonomically studied under different types of microscopes such as polarized and plain light microscopes (Jans et al. 2004; Brönnimann et al. 2018), scanning electronic microscopes (Turner-Walker and Jans 2008; Bell 2012). Although the taphonomic process has been intensely studied on the skeletal human remains, the microtaphonomy of the archaeological soft tissues has not yet studied to the same degree. Considering that the human soft tissue remains are extremely rare findings during archaeological excavation, it is necessary to use complex research tools (i.e. microscopy, histological techniques, image analysis and histological scores assessment), in order to obtain as much as possible information about the preserved microstructures. The aim of this mini review is to highlight the importance of microscopic and histological methods and techniques used in microtaphonomical studies of non-skeletal human remains discovered in archaeological sites. This paper emphasizes the histotaphonomy value in multidisciplinary and complementary bioarcheological studies.

#### MICROTAPHONOMY OF BRAIN

The preserved archaeological human brain is a particular rare discovery due to the post-mortem decomposition process of its soft tissues. However, there are few cases of preserved cerebral tissues recovered from archaeological sites and forensic contexts (Eklektos et al. 2006; Kim et al. 2008; Altinoz et al. 2014; Serrulla et al. 2016).

Remains of human cerebral tissue can be preserved in exceptional conditions in which the biodeterioration process has been inhibited, due it to microenvironment and burial conditions as highly important factors in the taphonomic process that favored preservation. The most known example is represented by the 5200 years old Ötzi (also called the Iceman), discovered in 1991 in the glacial field of the Ötztal Alps (Hess et al. 1998). The study of his body showed preserved myelinated nerve fibers from the cerebral cortex, diaphragm and skin. Another study on an emblematic example of preserved brain has been conducted by Papageorgopoulou et al. (2010), and it showed well-preserved neuronal tissues (grey and white matter, neuronal remains near the hippocampus, Nissl bodies) from a left cerebral hemisphere of a 13<sup>th</sup> century child. Grey and white matter, but no neuronal bodies, has been also identified in a medieval Korean preserved brain (Kim et al. 2008). Histotaphonomical investigations on cerebral tissues have been reported also on more recently preserved samples from World War I (WWI) and Spanish Civil War (Serrulla et al. 2016; Gaudio et al. 2019).

Histological investigations have been applied in a multidisciplinary approach in the attempt to elucidate the taphonomic processes that conducted to preservation. Usually, in such investigations, optical microscopy has been used for the microanatomy screening of the preserved tissue. Therefore, many histological stain techniques

were applied (routine and specialized ones) for detection of neural structures and microorganisms (Table 1).

*Table 1*

Histological investigations on human brain remains

| No. | Provenance of sample              | Performed analysis |                                                                                                                                                    | Reference                      |
|-----|-----------------------------------|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
|     |                                   | Microscopy Type    | Histological stains                                                                                                                                |                                |
| 1   | Windower, Florida, US             | Optical            | Silver stain, H&E, Luxol fast blue                                                                                                                 | Doran et al. (1986)            |
| 2   | Ötztal Alps, Switzerland          | Optical /TEM       | Coomassie blue, Sudan black, silver stain                                                                                                          | Hess et al. (1998)             |
| 3   | Egypt                             | Optical            | H&E, Solochrome cyanine R, Bielschowsky                                                                                                            | Karlik et al. (2007)           |
| 4   | Chile                             | Optical/TEM        | Masson trichrome, Wilder reticulum, Gomori methenamine-silver, Perl iron, Verhoeff-van Gieson, Congo red, periodic acid-Schiff, Bielschowsky, Gram | Gerszten and Martínez (1995)   |
| 5   | Slovakia                          | SEM                | Classical SEM protocol steps                                                                                                                       | Chudá et al. (2010)            |
| 6   | Kutahya, Western Anatolia, Turkey | Optical            | Decalcification methods, H&E, TB                                                                                                                   | Altinoz et al. (2014)          |
| 7   | Schleswig, Germany                | Optical            | AZAN stain and KPM stain                                                                                                                           | Grupe et al. (1997)            |
| 8   | Yorkshire, UK                     | Optical/SEM/TEM    | H&E, TB                                                                                                                                            | O'Connor et al. (2011)         |
| 9   | Burgos, Spain                     | Optical/ TEM       | H&E, Prussian blue, Bielschowsky, Sevier-Munger silver stain                                                                                       | Serrulla et al. (2016)         |
| 10  | Bushveld, South Africa            | Optical            | H&E, Cresyl violet Marsland, Glees, and Erickson method                                                                                            | Eklektos et al. (2006)         |
| 11  | Cova des Pas, Minorca, Spain      | Optical            | H&E, Masson Trichrome                                                                                                                              | Prats-Muñoz et al. (2013)      |
| 12  | Yongin, Korea                     | Optical/TEM        | DAPI, TB, Bielschowsky, Oil red O                                                                                                                  | Kim et al. (2008)              |
| 13  | France                            | Optical            | H&E, Giemsa, Cresyl-violet, Luxol Fast Blue, Kluver-Barrera, PAS, Warthin-Starry                                                                   | Papageorgopoulou et al. (2010) |

H&E – hematoxylin & eosin, TB – toluidine blue, DAPI – 4',6-diamidino-2-phenylindole, AZAN – azocarmine/aniline alcohol, KPM – keratin-prekeratin-mucin.

### MICROTAPHONOMY OF HAIR FIBERS

Archaeological human hair can offer valuable information to both bioarcheology and forensic science (Robertson 1999). Hair fibers can be discovered in special archaeological contexts under specific condition of preservation. Regarding the microenvironment that favors preservation, Wilson (2008) mentions that hairs

located at the base of a grave could be better preserved than those situated in the upper level. A restricted or inhibited microbial activity is necessary for the morphological and structural preservation of hairs (Wilson et al. 2007). The prevention of soil contact with hairs and the protection of a metal coffin favor the preservation (Owsley et al. 2006; Bertrand et al. 2014).

Nowadays, the taphonomic research of hairs is focused on two main directions: structural and morphological changes in root and shaft (Domzalski 2004; Wilson et al. 2007). Regarding the post-mortem changes of the hairs root, it is known that its vulnerability to degradation is due to different degrees of keratinization. Several studies based on light microscopy and electronic microscopy, concluded that the post-mortem changes of the hair root are characterized by a dark opaque band known as post mortem root band (PMRB) (Koch et al. 2013; Hietpas et al. 2016). According to Donfack and Castillo (2018), the PMRB is produced by microbial enzymatic activity which degrades the pre-keratinized structure of the root. As a result, the air/gas is entombed between the hair microfibers.

From a biochemical point of view, hair shaft preservation is due to the presence of numerous disulfide bonds from the thiol fragments of cysteine, which confer the ability to withstand against extreme environmental conditions (Wolfram 2003).

Due to the presence of keratin (one of the most stable proteins), in proportions of 85%–93% (Kempson and Lombi 2011), the hair shafts can be degraded by the keratinolytic micro-organisms and some adult and larval insects from the families Dermistidae and Tineidae (Janaway et al. 2009; Tridico et al. 2014; Mazzarelli et al. 2015). Among keratinolytic micro-organisms, the fungi represent an important factor to biodegradation. The keratinolytic action of fungi manifests itself on the hair shaft surface by invading it and leaving an ovoid hole with eroded margins (Figure 1). The process is described in the scientific literature as “*fungus tunneling*” (Wilson et al. 2007). Initially, the biodegradative action of the fungi exoenzymes is perpendicular to the longitudinal axis of the hair shaft, after which it can take a lateral direction, disrupting the cortex and medulla (Wilson 2017b).

Regarding the microscopy as a tool research in the attempt to fill the gaps in the *microtaphonomy* of the keratin fibers, nondestructive and semi-destructive techniques were used in the last two decades (Wilson et al. 2007; Wilson et al. 2010; Bertrand et al. 2014; Petraru et al. 2020). The light microscopy is a valuable method for hair research that can reveal some external and internal features (slicing histological techniques are required) such as: hair profile type, color, medulla type, cuticle morphology, adhesive deposits on the hair shafts surface, structural changes (Seta et al. 1988; Robertson 1999; Bertrand et al. 2014). In a recent work conducted by Petraru et al. (2020), cryotomy and fluorescence microscopy coupled with image analysis were used in order to obtain qualitative and quantitative data regarding the internal degradation of human hairs.

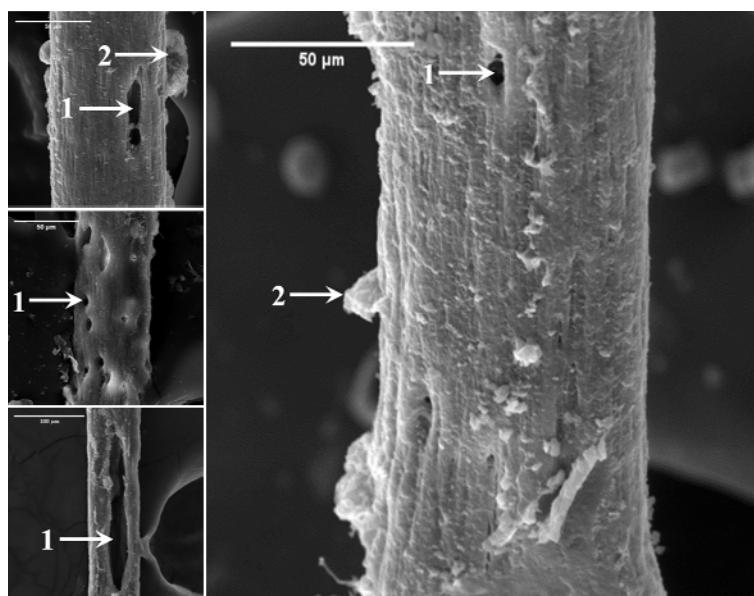


Fig. 1. Human hair shafts discovered during the archaeological excavation at “Adormirea Maicii Domnului” Roman Catholic Cathedral of Iași (Romania) – SEM micrographs showing different stages of surface lesions by fungal tunneling (1) and deposits (2).

One reliable investigation tool is the scanning electronic microscope, which was used to identify and evaluate the surface morphological changes and the degree of degradation of several archaeological hair shafts discovered in different contexts, such as in coprolites (Backwell et al. 2009; Taru and Backwell 2013), and burials (Bertrand et al. 2014; Fresnais et al. 2015). Based on the Oxford Histological Index (OHI) established by Hedges et al. (1995) for bone taphonomy, Wilson et al. (2010) designed a scoring system for the hair external degradation providing semi-quantitative data. In order to obtain detailed information concerning the hair internal ultrastructure, the transmission electron microscopy (TEM) was used in several hair taphonomic research (Shin et al. 2003; Chang et al. 2006; Wilson et al. 2007; Wilson 2017a).

#### OTHER TYPES OF HUMAN NON-SKELETAL REMAINS

The preservation of human remains soft tissues provides a special opportunity to obtain historical information through multidisciplinary approaching such as histotaphonomy, paleopathology, archaeothanatology. Usually, the soft tissues are damaged during the decomposition of an organism, but they survive the taphonomic process in particular environment conditions (Mcnamara et al. 2012). For instance, a study focused on detecting soft tissues in ancient human bones of Middle Bronze

Age showed preserved *red blood cells* in remains of hematopoietic tissue recovered from a medullary cavity, although macroscopically the skeletal elements were described as fragmented (Setzer et al. 2013). In the same prehistoric context, in the Cova des Pas site (Minorca, Spain), preserved soft tissue remains were discovered at 66 individuals (i.e. *pulmonary parenchyma*, *connective tissue*, *striated muscle*, and *reticular tissue* within the intracranial content) (Prats-Muñoz et al. 2013). In the Historic Cave of Limpopo (South Africa), during the 2001–2007 archaeological excavations, natural mummified human remains were discovered; in this case the optical and electronic microscopy showed the good preservation state of *muscle tissue*, *connective tissue* and *epidermal keratinocytes* (Karodia et al. 2016).

Other soft human remains have been discovered in glacial environments such as the cases of the famous Tyrolean Iceman and the young man frozen in a glacier in the Tatshenshini-Alsek Park in northern British Columbia (Canada), in which *connective*, *nervous*, *epithelial tissues* and *skeletal muscle tissues* were identified (Hess et al. 1998; Monsalve et al. 2008; Quaroni et al. 2013). A recent work focused on the taphonomic details of the WWI human remains discovered in the Italian glaciers showed different stages of preservation from mainly saponified tissues to good microscopic preservation of several organs (skin, muscles, liver, intestine) (Gaudio et al. 2019). A microscopy based research, conducted by Esteban et al. (2015), described the histology of a preserved eye and optic nerve, including the related pathologies, in a women belonging to the Peruvian Lambayeque culture (900–1200 AD, Peru).

As it results from the case studies presented above, the application of microscopy and histology as research methods can fill the gaps into the knowledge of taphonomic changes at non-skeletal human remains discovered in archaeological contexts. Although some methodologies have an invasive trait, this injury can be limited by reducing the sample size and by preserving and archiving it for indefinite time. The microtaphonomy research can respond to wider paleoanthropological questions and to other related scientific fields such as funerary archaeology and forensic science. This particular avenue of research involves further methodological development, training of researchers, and better collaborative communication between scientists.

## CONCLUSIONS

The microtaphonomy of the archaeological non-skeletal human remains is a promising research niche with development potential in the current state of knowledge aiming paleoanthropology, forensic science, medicine, archaeology and history. Nowadays, the microscopic and histological advanced methods, including slicing and stains techniques, used for post-mortem investigation of human tissues provide a valuable source of information in the microtaphonomy.

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# L'HARMONIE DES CERTAINES PROPORTIONS DU TRONC CHEZ UNE SÉLECTION DES ADULTES DE LA POPULATION DE ROUMANIE

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This paper is the third study regarding the harmony of some body proportions appreciated in metric and modular system (Luca et al., 2018: 69–83; Luca et al., 2019: 39–53). The group of subjects comprises 743 males with an average age of  $36.88 \pm 11.88$  years and 709 females with an average age of  $32.74 \pm 10.62$  years, coming from the main historical and geographical provinces of Romania. Five dimension modules (head length, total facial height, sternum height, chest depth, hand length) were put in proportion with stature/height, between them and with three torso diameters (shoulders width, pelvis width, transverse thoracic diameter) resulting 25 proportions on which are added the indexes of shoulders width, pelvis width, and torso shape. The average values of some dimensions and of torso indexes were compared with the average national values (Z). No significant differences were observed, which confers representativeness for the group. The average values of the proportions resulted based on dimensions modules were compared with canons from the art history and with “canons” deduced by us from the anthropometric practice based on new dimension modules (sternum height, chest depth, head length). The results mostly confirm the closeness to the canons and sustain the harmonious development of the torso despite the volume fluctuations, the differences between the samples, and the possible microevolutionary differences. The metric and conformational dimorphism highlighted by Student test (t), sexual dimorphism index, and Z-test illustrate a harmonious development for both sexes, a little more emphasized for males.

**Keywords:** anthropometry, body proportion, module, canon, sexual dimorphism.

## INTRODUCTION

« L'homme bien proportionné, bien accompli, il faut qu'il ait dix faces en stature et deux faces en largeur des épaules. (...) » (Leonardo da Vinci, *Esthétique*)

Le présent travail est le troisième étude concernant l'harmonie des certaines proportions corporelles appréciée en système métrique et/ou modulaire (Luca, 2018:

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69–83; 2019: 39–53). Les deux travaux antérieurs faisaient références aux proportions corporelles de certaines dimensions situées sur l'axe longitudinal du corps, composantes de la stature, comparées aux différents canons de l'histoire de l'art. Les dimensions principales prises comme modules étaient la hauteur physiologique de la face, la longueur de la main et la hauteur du sternum. Tant pour les hommes que pour les femmes de la sélection étudiée, les trois dimensions-modules réalisent en proportions approximativement 1/10 de la stature. En ce qui concerne le dimorphisme sexuel, les différences selon les dimensions, les proportions et l'éloignement des proportions aux canons, sont davantage favorables aux hommes.

Le présent travail se réfère spécialement à l'harmonie du développement du tronc et à côté aux trois dimensions-modules utilisées dans les travaux antérieurs nous avons ajouté encore deux dimensions situées en plan sagittal (médian), des diamètres antéro-postérieurs: la longueur de la tête et la profondeur du thorax. La recherche des proportions corporelles basées sur les cinq dimensions-modules proposées et concernant une présentation tridimensionnelle (concernant les trois axes et plans du corps humain) représente une meilleure caractérisation d'un développement harmonieux.

#### MATÉRIEL ET MÉTHODES

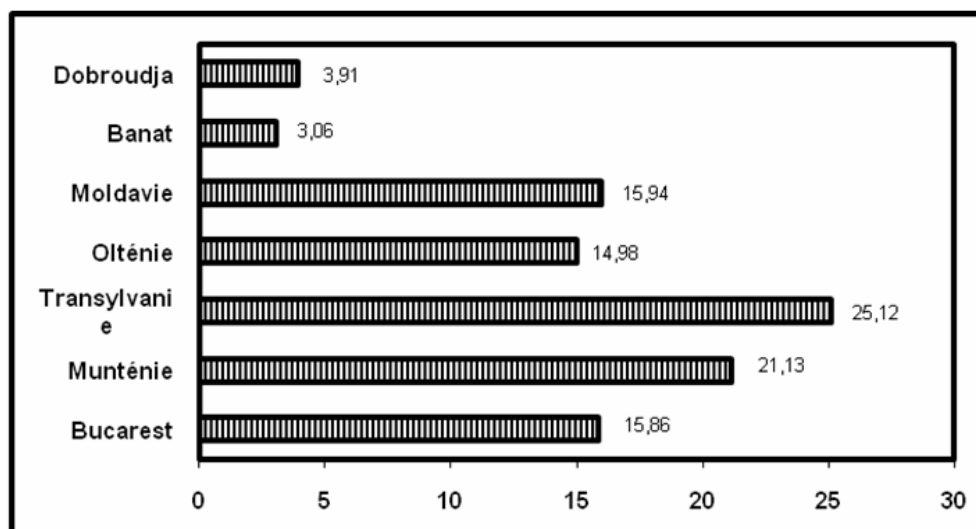


Fig. 1. Lieu de naissance des sujets selon les provinces historique roumaines (%).

Le lot de recherche (faiblement modifié par rapport au lot antérieur) est composé par 743 hommes d'âge moyen de  $36,88 \pm 11,88$  ans et 709 femmes d'âge moyen de  $32,74 \pm 10,62$  ans. Les dix échantillons des sujets de deux sexes proviennent de toutes les provinces historico-géographiques de la Roumanie: Bran et Fundata-Braşov,

Bucium-Alba, Săliște-Sibiu et Maieru-Bistrița-Năsăud en Transylvanie, département Gorj (l'ensemble Novaci et Târgu-Cărbunești) en Olténie, Soveja-Vrancea en Moldavie et autres trois échantillons – deux de la recherche en filiation et un d'étudiants écologistes – avec des sujets de mêmes provinces ci-dessus et aussi Bucarest, Munténie, Dobroudja et Banat. (Fig. 1). Selon l'échantillon, l'amplitude d'âge moyen a un minimum de  $25,2 \pm 7,78$  ans chez les étudiants et de  $23,42 \pm 5,32$  ans chez les femmes de Săliște, respectivement un maximum de  $45,86 \pm 9,41$  ans chez les hommes de Soveja et de  $41,65 \pm 14,23$  chez les femmes de Fundata. Chez les deux sexes prédominent les catégories d'âge de 21–30 et 31–40 ans. Le volume des sujets est variable selon le caractère considéré et les données collectées et mises à la disposition (tableau 1). On a appliqué la méthodologie statistique classique utilisée en anthropologie physique. Au centre du travail se trouvent les cinq dimensions-modules: la longueur de la tête (g-op), la hauteur physionomique ou totale de la face (tr-gn), la hauteur du sternum (sst-xy), le profondeur du thorax (DAPTo) et la longueur de la main (sty-da). On note que pour la hauteur totale de la face (tr-gn) existent des données seulement chez les étudiants de l'Université Écologique. Les proportions sont constituées après la formule  $A/B \cdot 100$ . Les dimensions-modules ont été mises en proportions avec la stature (V-sol) pour prouver que celles-ci représentent approximativement 1/10 de la stature et aussi entre elles-mêmes pour prouver un rapport de 100%. Finalement, pour apprécier l'harmonie du développement du tronc, les modules choisies ont été rapportées aux dimensions transversales du tronc: la largeur des épaules (a-a), largeur du bassin (ic-ic) et le diamètre transversal du thorax (DTTo). Pour apprécier la conformation du tronc ont été calculés trois indices:  $a-a/V-sol$ ,  $ic-ic/V-sol$  et  $ic-ic/V-sol$ . Les valeurs moyennes des certaines dimensions et des indices du tronc ont été comparées par la distance réduite  $z$  avec les valeurs moyennes nationales. (Fig. 2). On note que nous avons fait une synthèse sur le pays concernant les dimensions du tronc et la longueur de la main, dimensions qui n'ont fait l'objet de l'Atlas de la Roumanie (Radu et al. 2011: 47–100), en calculant les valeurs moyennes pondérées auxquelles nous avons comparé nos résultats (tableau 3, Fig. 2). Les proportions des dimensions-modules en stature, entre elles-mêmes et en diamètres du tronc ont été comparées avec les canons de l'histoire de l'art ou déduits/proposés par nous-mêmes pendant la pratique anthropométrique: on a calculé la différence en unités de proportion = u.p. et l'éloignement par rapport au canon à l'aide de la distance réduite  $z$  en unités sigmatiques = u.s. (Fig. 4). Le dimorphisme sexuel a été apprécié par le test Student ( $t$ ) et l'indice de dimorphisme sexuel:  $Ind.D.sex. = \text{valeur moyenne femmes} / \text{valeur moyenne hommes} \cdot 100$  (Fig. 5). On note que les dimensions auxquelles on fait des références dans ce travail ont de différentes positions et points de repère sur les plans du corps et des différentes instruments et technique de mesurage: pour g-op on utilise le petit compas, pour tr-gn et sty-da le pied à coulisse, pour sst-xy l'anthropomètre (ou par la différence ex. entre la hauteur antérieure du tronc, sst-assis et la hauteur abdominale, xy-assis, des

dimensions mesurées aussi avec l'anthropomètre) et pour les diamètres du tronc (a-a, ic-ic, DApTo et DTTo) on utilise le grand compas. On note aussi que les mesurages ont été effectués par la même personne (le premier auteur du travail) excepté les échantillons de Maieru (Vlădescu, Vulpe, 2005: 61) dont les données nous ont été offertes par la regrettée Dr. Maria Vlădescu (1930–2013). On ajoute aussi que la bibliographie a restée, en général, la même des travaux antérieurs.

## RÉSULTATS ET COMMENTAIRES

### 1. Caractérisation des hommes et femmes du lot de recherche (Tableau 1–3, Fig. 2–3)

Tableau 1

Valeurs moyennes des dimensions du lot de recherche

| Dimensions<br>(mm) | Hommes |         |       | Femmes |         |       |
|--------------------|--------|---------|-------|--------|---------|-------|
|                    | N      | M       | DS    | N      | M       | DS    |
| V-sol              | 753    | 1709,36 | 68,04 | 669    | 1591,93 | 62,13 |
| g-op               | 655    | 185,99  | 6,8   | 569    | 177,55  | 5,94  |
| tr-gn              | 30     | 182,9   | 10,91 | 46     | 174,02  | 7,1   |
| sst-xy             | 288    | 184     | 20,7  | 148    | 183,59  | 18,58 |
| DApTo              | 405    | 202,94  | 20,85 | 295    | 181,7   | 21,24 |
| DTTo               | 191    | 278,76  | 19,88 | 162    | 249,46  | 19,48 |
| sty-da             | 390    | 180,66  | 10,7  | 375    | 165,12  | 9,75  |
| a-a                | 439    | 382,64  | 20,85 | 344    | 352,77  | 18,08 |
| ic-ic              | 439    | 282,81  | 20,05 | 341    | 283,85  | 23,86 |

La caractérisation a la base les valeurs moyennes des nos données et des données nationales.

Conformément à l'*Atlas Anthropologique de la Roumanie* (Radu et al., 2011: 41–100), après les valeurs moyennes et les échelles anthropologiques de variation, les hommes roumains ont une stature surmoyenne (1682,2 mm), la longueur de la tête moyenne (184,78 mm), les largeurs relatives des épaules (22,94) et du bassin (17,1) moyennes et le tronc de forme intermédiaire à la limite supérieure de la catégorie. Les femmes roumaines ont une stature surmoyenne au début de la catégorie (1562,95 mm), la tête moyen en longueur à la limite supérieure de la catégorie (176,55 mm), la largeur relative des épaules moyenne (22,71) et celle du bassin large (18,78) et la forme du tronc rectangulaire accentuée (82,34).

Concernant les données du lot, les valeurs moyennes des caractères présentées ci-dessus sont un peu différentes. Les hommes ont une stature grande au début de la catégorie (1709,36 mm), la longueur de la tête moyenne à la limite supérieure de la catégorie (185,99 mm) (Tableau 1), les largeurs relatives des épaules (22,46) et du bassin (16,58) sont moyennes et la forme du tronc est intermédiaire (73,77) (Tableau 2). Les femmes ont une stature grande au début de

la catégorie (1591,93 mm), une tête longue à la limite inférieure (177,55 mm) (Tableau 1), des épaules moyennes en largeur au début de la catégorie (22,08), le bassin moyenne (17,78) et le tronc rectangulaire (79,86) (Tableau 2).

Tableau 2

Valeurs moyennes de la conformation du tronc

| Proportions |        | N   | M     | DS   | M min. | Échantillon | M max. | Échantillon |
|-------------|--------|-----|-------|------|--------|-------------|--------|-------------|
| a-a/V-sol   | Hommes | 439 | 22,46 | 1,37 | 22,01  | Bucium      | 22,77  | Fundata     |
|             | Femmes | 343 | 22,08 | 1,07 | 21,64  | Săliște     | 22,77  | Fundata     |
| ic-ic/V-sol | H      | 439 | 16,58 | 1,21 | 16,09  | Săliște     | 17,33  | Soveja      |
|             | F      | 340 | 17,78 | 1,47 | 16,92  | Săliște     | 18,82  | Fundata     |
| ic-ic/a-a   | H      | 439 | 73,77 | 4,78 | 71,62  | Săliște     | 76,09  | Soveja      |
|             | F      | 341 | 79,86 | 5,98 | 78,31  | Săliște     | 81,86  | Soveja      |

Tableau 3

Valeurs moyennes des certaines dimensions corporelles. Une synthèse nationale

| Dimensions (mm)   |           | Hommes |        |       | Femmes |        |       |
|-------------------|-----------|--------|--------|-------|--------|--------|-------|
|                   |           | N      | M      | DS    | N      | M      | DS    |
| Hauteur ant.tronc | sst-assis | 10890  | 577,59 | 36,06 | 8251   | 549,61 | 40,36 |
| Hauteur sternum   | sst-xy    | 8714   | 185,37 | 24,69 | 7744   | 169,62 | 37,04 |
| Hauteur abdominal | xy-assis  | 8211   | 396,34 | 34,05 | 7401   | 387,03 | 45,96 |
| Longueur main     | sty-da    | 488    | 181,38 | 9,74  | 541    | 166,76 | 9,06  |

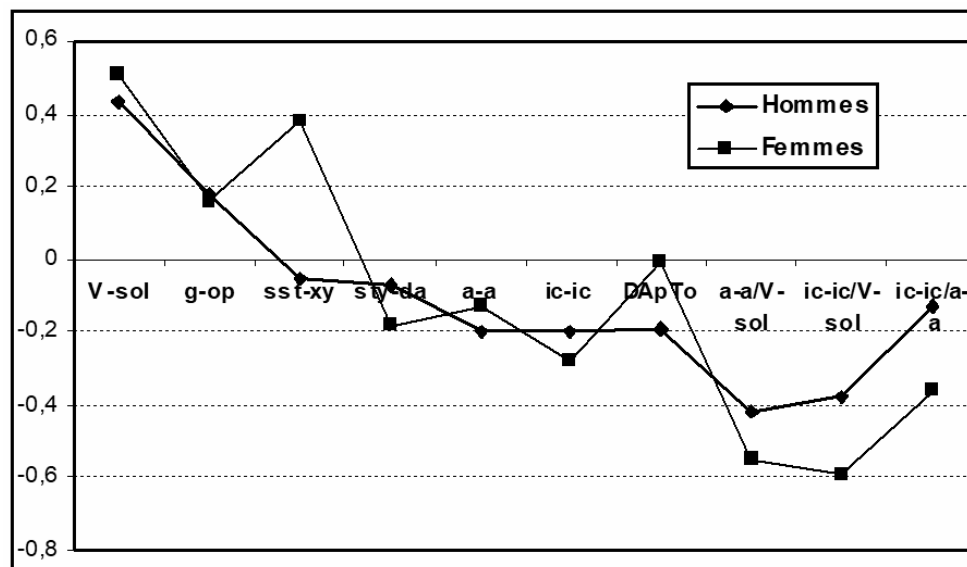


Fig. 2. Éloignement des valeurs moyennes des certains caractères du lot par rapport aux données nationales (z).

Les éloignements des valeurs moyennes des nos données concernant les dimensions de la recherche et les trois indices du tronc par rapport aux données nationales (Tableau 3, Fig. 2) ne dépassent pas les limites de l'intervalle «  $M \pm DS$  », donc les différences ne sont pas statistiquement significatives. Les valeurs réduites  $z$  sont comprises entre  $-0,42$  et  $+0,43$  chez les hommes et entre  $-0,59$  et  $+0,51$  chez les femmes. Moyennement, les sujets de deux sexes du lot sont faiblement plus hauts, ont une tête un peu plus longue, un bassin et des épaules plus étroites et un thorax moins profond. En plus, les femmes ont la main plus courte et le sternum plus long (les femmes de Soveja) (Fig. 2).

Le dimorphisme sexuel concernant les dimensions et les indices du tronc qui caractérisent le lot de recherche, prouvé par le test Student et les indices, met en évidence des différences assez fortes entre les deux sexes, la plupart favorable aux hommes. (Tableau 2, Fig. 3). Excepté le sternum et le bassin, les hommes dépassent significativement les femmes par les dimensions, spécialement par la longueur de la main ( $t = 51,8$ ) et la stature ( $t = 34,04$ ). Les différences concernant la conformation du tronc sont statistiquement significatives, les épaules plus larges chez les hommes et le bassin plus large et tronc rectangulaire chez les femmes. Les indices de dimorphisme soutiennent les mêmes différences, seulement ceux pour le bassin et la forme du tronc (ic-ic, ic-ic/V-sol et ic-ic/a-a) étant en faveur des femmes ( $> 100$ ) (Fig. 3).

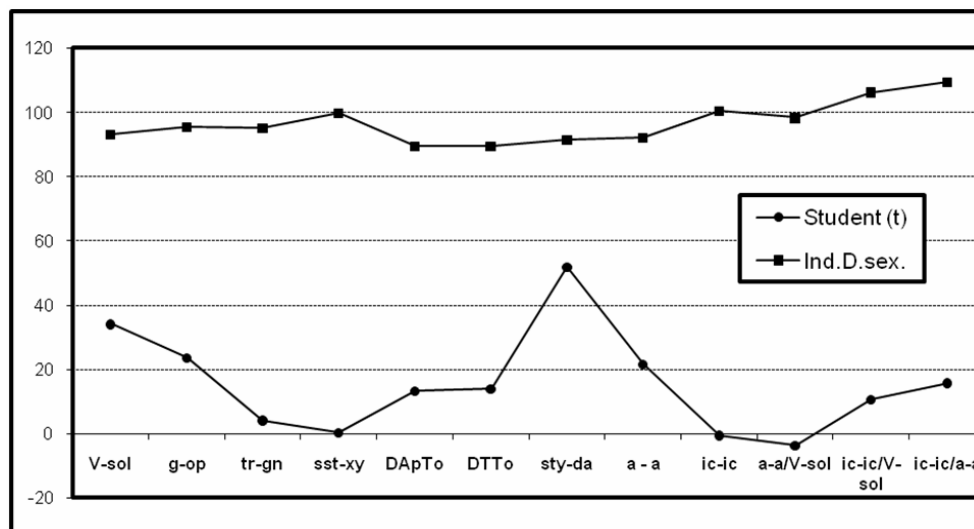


Fig. 3. Dimorphisme sexuel concernant les dimensions de la recherche et les indices du tronc (t, %).

## 2. Les proportions par rapport aux canons historiques ou proposés (Tableau 4, Fig. 4–5)

Nous nous référons aux valeurs moyennes des proportions ayant en composition les cinq modules: la longueur de la tête (g-op), la hauteur totale de la face (tr-gn), la



hauteur du sternum (sst-xy), la profondeur du thorax (DApTo) et la longueur de la main (sty-da), des proportions de trois sortes selon leur forme: les modules en stature, les modules entre eux, les modules en certaines dimensions du tronc (Tableau 4).

Tableau 4

Valeurs moyennes des proportions du lot par rapport aux canons historique ou proposés

|    | Proportions   | Canon | Hommes |        |       | Femmes |        |       |
|----|---------------|-------|--------|--------|-------|--------|--------|-------|
|    |               |       | N      | M      | DS    | N      | M      | DS    |
| 1  | g-op/V-sol    | 10    | 616    | 10,86  | 0,47  | 529    | 11,13  | 0,47  |
| 2  | tr-gn/V-sol   | 10    | 30     | 10,5   | 0,62  | 46     | 10,63  | 0,54  |
| 3  | sst-xy/V-sol  | 10    | 288    | 10,82  | 1,13  | 172    | 11,86  | 1,3   |
| 4  | DApTo/V-sol   | 10    | 383    | 11,77  | 1,18  | 294    | 11,48  | 1,4   |
| 5  | sty-da/V-sol  | 10    | 353    | 10,54  | 0,56  | 334    | 10,39  | 0,56  |
| 6  | g-op/tr-gn    | 100   | 30     | 103,11 | 7     | 46     | 102,04 | 4,72  |
| 7  | g-op/sst-xy   | 100   | 288    | 100,92 | 10,54 | 165    | 95,59  | 10,22 |
| 8  | g-op/DApTo    | 100   | 380    | 92,86  | 8,66  | 293    | 97,95  | 10,74 |
| 9  | g-op/sty-da   | 100   | 306    | 102,37 | 6,44  | 271    | 104,63 | 6,39  |
| 10 | tr-gn/DApTo   | 100   | 7      | 92,5   | 10,15 | 12     | 100,6  | 8,45  |
| 11 | sst-xy/DapTo  | 100   | 261    | 92,58  | 11,08 | 169    | 99,86  | 14,72 |
| 12 | sst-xy/sty-da | 100   | 81     | 100,9  | 13,63 | 30     | 104,71 | 11,4  |
| 13 | sty-da/tr-gn  | 100   | 25     | 95,02  | 5,84  | 40     | 94,03  | 4,55  |
| 14 | sty-da/DapTo  | 100   | 91     | 95,22  | 10,05 | 63     | 95,73  | 10,55 |
| 15 | g-op/a-a      | 50    | 439    | 48,47  | 2,69  | 344    | 50,35  | 2,79  |
| 16 | g-op/ic-ic    | 66,66 | 434    | 65,89  | 4,28  | 320    | 63,67  | 4,45  |
| 17 | tr-gn/a-a     | 50    | 30     | 46,44  | 2,97  | 46     | 48,39  | 2,75  |
| 18 | tr-gn/ic-ic   | 66,66 | 30     | 65,42  | 5,56  | 45     | 60,87  | 5,5   |
| 19 | sst-xy/a-a    | 50    | 283    | 48,65  | 4,67  | 161    | 52,34  | 4,52  |
| 20 | sst-xy/ic-ic  | 66,66 | 287    | 65,46  | 5,91  | 172    | 66,14  | 6,8   |
| 21 | DApTo/a-a     | 50    | 400    | 52,52  | 4,65  | 270    | 51,17  | 4,81  |
| 22 | DApTo/ic-ic   | 66,66 | 388    | 70,3   | 5,67  | 280    | 65     | 5,82  |
| 23 | DapTo/DTTo    | 66,66 | 191    | 68,73  | 5,37  | 155    | 68,53  | 5,55  |
| 24 | sty-da/a-a    | 50    | 119    | 47,03  | 3,45  | 97     | 46,59  | 2,71  |
| 25 | sty-da/ic-ic  | 66,66 | 119    | 63,74  | 4,88  | 70     | 61,19  | 3,56  |

### 2.1. Modules en stature (Tableau 4, Fig. 4)

L'hypothèse présume q'un certain module est 1/10 ou 10% de la stature. Les hommes réalisent des proportions assez proches aux canons, entre 10,5 (tr-gn/V-sol) et 11,77 (DApTo/V-sol) la seule proportion > 11. Donc, chaque module représente, en valeur moyenne, approximativement 1/10 de la stature. Toutes les valeurs moyennes des proportions dépassent faiblement la valeur du canon, les différences arithmétiques étant comprises entre 0,5 u.p. (tr-gn en stature) et 1,77 u.p. (DApTo en stature). La distance z est significative pour la longueur de la tête et la profondeur du thorax en stature (> 1 u.s. et < 2 u.s.). Comparativement, chez les femmes les valeurs moyennes des proportions sont un peu plus éloignées par rapport au canon, comprises entre 10,39 (sty-da/V-sol) et 11,86 (sst-xy/V-sol). Les différences, entre

0,39 u.p. – 1,86 u.p., mettent en évidence trois proportions plus éloignées au canon: g-op/V-sol (11,13), DApTo/V-sol (11,48) et sst-xy/V-sol (11,86). Les distances réduites significatives soutiennent les différences pour celles-ci et aussi pour la proportion de la hauteur totale de la face en stature. La longueur de la tête en stature paraît être la plus éloignée par rapport au canon ( $z = 2,4$ ), quoique la valeur moyenne de la proportion est 10,63%.

## 2.2. Proportions entre les modules choisis (Tableau 4, Fig. 4)

En partant de l'hypothèse que chaque dimension choisie comme module rapporté à la stature réalise au niveau d'une population une proportion, en valeur moyenne, de 1/10 ou 10% de la stature, on arrive à la conclusions qu'il faudrait que les valeurs moyennes des proportions entre les dimensions-modules soient environ de 1/1 ou 100%. Nous avons prouvé en calculant les valeurs moyennes des neuf telles proportions (Tableau 4).

Les hommes réalisent des proportions, en valeurs moyennes, entre 92,58% (sst-xy/DAPTo) et 103,11% (g-op/tr-gn), les plus proches de canon proposé étant la proportion entre le sternum et la main (100,9) et celle entre tête et sternum (100,92). Il n'existent pas des différences significatives par rapport au canon, les distances réduites  $z$  étant comprises entre  $-0,85$  (sty-da/tr-gn) et  $+0,44$  (g-op/tr-gn). Les proportions très proches de canon ont aussi la valeur de  $z$  presque nulle (0,07 et 0,09) (Tableau 4, Fig. 4).

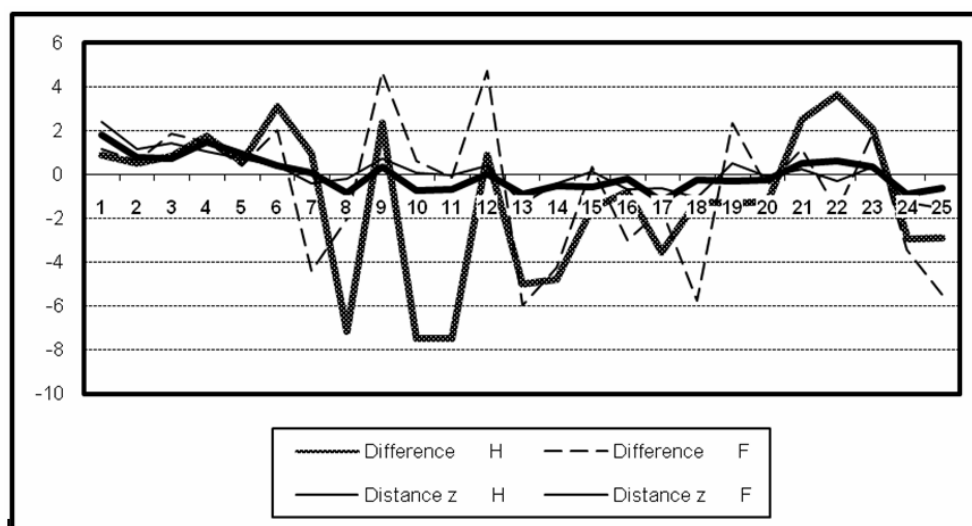


Fig. 4. Éloignement des proportions par rapport aux canons (u.p.; u.s.).

Les femmes réalisent aussi des proportions, en valeurs moyennes, assez proches de canon, entre 94,03% (sty-da/tr-gn) et 104,71% (sst-xy/sty-da), les plus

proches de canon proposé étant la proportion du sternum en profondeur du thorax (99,86%) et la face totale en profondeur du thorax (100,6%). Les distances réduites sont comprises entre  $-1,31$  (sty-da/tr-gn) et  $+0,72$  (g-op/sty-da), la seule distance significative, ( $z = -1,31$ ), concernant la proportion entre la main et la face totale (on voit dans la caractérisation que les femmes du lot ont une main plus courte). Les proportions très proches de canon ont aussi la valeur de  $z$  presque nulle ( $-0,01$  et  $0,07$ ) (Tableau 4, Fig. 4).

### 2.3. Modules rapportés aux largeurs du tronc (Tableau 4, Fig. 4)

Il faut préciser que nous n'avons pas eu au début de la recherche une hypothèse concernant les proportions entre les dimensions-modules et certaines dimensions du tronc. La révision des travaux antérieurs et des canons et modules de l'histoire des arts plastiques, spécialement les travaux et la conception de Leonardo da Vinci en Esthétique: „L'homme bien proportionné, bien accompli, il faut qu'il ait dix faces en stature et deux faces en largeur des épaules...” (Radian, 1981: 243) nous a convaincu de prouver le comportement des dimensions-modules par rapport aux largeurs principales du tronc: largeur des épaules, du bassin, du thorax (diamètre transversal thoracique, DTT<sub>o</sub>). Nous nous référons ici aux 11 proportions. Seulement la profondeur du tronc (DAP<sub>To</sub>) a été mis en proportion du diamètre transversal thoracique (DTT<sub>o</sub>) qui est considéré identique dans les fiches d'Atlas à la largeur du bassin (ic-ic) et, parfois, même à la largeur des épaules (a-a) ! Ainsi, hypothétiquement, selon le canon, il faut que la proportions des modules en largeur des épaules soit  $\frac{1}{2}$  ou 50% et en largeur du bassin soit  $\frac{2}{3}$  ou 66,66% (Tableau 4).

Chez les hommes du lot les valeurs moyennes de la proportion des modules en largeurs des épaules sont comprises entre 46,44% (tr-gn/a-a) et 52,52% (DAP<sub>To</sub>/a-a) et la seule différence significative par rapport au canon s'enregistre pour la face totale en largeur des épaules ( $z = -1,2$ ). La plus proche valeur moyenne est la proportion du sternum en largeur des épaules (sst-xy/a-a), 48,65% ( $z = -0,29$ ). La proportion des modules en largeur du bassin (ic-ic) est entre 63,74% pour la longueur de la main (sty-da) et 70,3% pour la profondeur du thorax (DAP<sub>To</sub>). Il n'existent pas de différences significatives par rapport au canon et la plus proche proportion de ceci est la longueur de la tête en largeur du bassin (g-op/ic-ic), de 65,89% ( $z = -0,18$ ). La proportion de la profondeur du tronc en diamètre transversal thoracique (DAP<sub>To</sub>/DTT<sub>o</sub>) est de 68,73%, valeur sans signification statistique ( $z = 0,38$ ) (Tableau 4, Fig. 4).

Chez les femmes les valeurs moyennes des proportions des modules en largeur des épaules sont comprises entre 46,59% (sty-da/a-a) et 52,34% (sst-xy/a-a), la seule différence significative par rapport au canon étant celle pour la proportion de la main en largeur des épaules (encore la main des femmes plus courte !) ( $z = -1,04$ ). La longueur de la tête en largeur des épaules (g-op/a-a), de 50,35%, est la plus proche proportion de canon ( $z = 0,12$ ). Les modules en proportion de la largeur du bassin

enregistrent des valeurs moyennes entre 60,8% (tr-gn/ic-ic) et 66,14% (sst-xy/ic-ic), la dernière valeur est aussi la plus proche de canon ( $z = -0,08$ ). Chez les femmes s'enregistrent deux différences significatives, pour sty-da/ic-ic ( $z = -1,54$ ) et tr-gn/ic-ic ( $z = -1,04$ ). La proportion du diamètre antéro-postérieur thoracique (DAPTo) en diamètre transversal thoracique (DTTo), 68,53% est presque égale à celle des hommes (68,73%), est la distance de canon n'est pas significative ( $z = 0,34$ ) (Tableau 4, Fig. 4).

### 3. Aspects du dimorphisme sexuel concernant les proportions (Tableau 4, Fig. 5)

Statistiquement, les femmes du lot dépassent faiblement les hommes par les valeurs moyennes des 25 proportions (52%: 48%), comme indiquent les indices de dimorphisme sexuel ( $> 100\%$ ) (Tableau 4, Fig. 5). Un poids de 64% (16/25) des différences concernant les valeurs moyennes des proportions sont également significatives (8: 8) pour les deux sexes. Les différences sexuelles concernant l'éloignement des proportions par rapport aux canons ont été signalées ci-dessus.

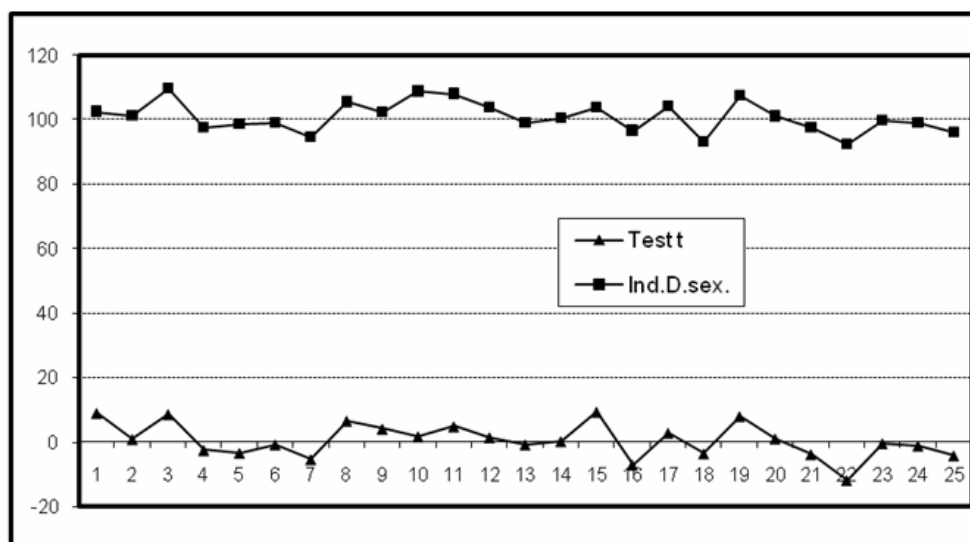


Fig. 5. Dimorphisme sexuel concernant les proportions du lot de recherche.

Indifféremment du test, on voit que tant les hommes que les femmes font avec la hauteur de la face (10,5%: 10,63%) et la longueur de la main (10,54%: 10,39%) des proportions en stature très approchées au canon (10%). On consigne une différence significative favorable aux femmes, la hauteur du sternum en stature (10,82%: 11,86%), une proportion à laquelle l'index de dimorphisme sexuel a la plus grande valeur de la totalité des indices calculés (109,61%) mais les hommes sont ceux qui s'approchent davantage au canon.

En ce qui concerne les proportions entre modules, les femmes dépassent significativement les hommes par la longueur de la tête en profondeur thoracique et en longueur de la main et la hauteur du sternum en profondeur thoracique. Les hommes enregistrent une seule différence significative, la longueur de la tête en sternum. On observe que les proportions des autres modules en profondeur thoracique ont des valeurs moyennes plus grandes chez les femmes et les indices de dimorphisme sexuel sont compris entre 100,54 – 108,76%.

Au niveau des largeurs du tronc les différences sexuelles significatives sont davantage en faveur des hommes (5: 3). Les femmes dominent les proportions des modules en largeur des épaules. Par la longueur de la tête, hauteur totale faciale et sternum, les femmes réalisent par rapport aux hommes des proportions en épaules significatives, plus grandes et plus approchées au canon ( $\approx 1/2$ ) tandis que les hommes enregistrent une seule proportion, la profondeur thoracique en épaules, significative et plus grande par rapport aux femmes mais celles-ci ont la valeur de la proportion plus approchée au canon. Concernant les proportions des modules en largeur du bassin, quatre de celles-ci sont chez les hommes significatives et plus grandes: la longueur de la tête, la hauteur faciale, la profondeur thoracique et la longueur de la main mises en proportion avec la largeur du bassin. Un cas intéressant est la proportion de la profondeur thoracique en bassin (comme aussi en épaules) qui diffère significativement par Student et l'indice de dimorphisme en faveur des hommes mais la proportion des femmes est la plus approchée au canon ( $\approx 2/3$ ). C'est la profondeur du thorax (DAPTo) le seul module qui a été rapporté aussi au diamètre transverse thoracique (DTTo) et la proportion respective est similaire chez les deux sexes et assez approchée au canon ( $\approx 2/3$ ) (Tableau 4, Fig. 5).

## CONCLUSIONS

Le travail vient d'élargir l'étude de l'appréciation de l'harmonie des certaines proportions corporelles chez une population roumaine en partant de différents canons de l'histoire des arts plastiques et de l'architecture en utilisant des modules historiques (la longueur de la main et la hauteur faciale physiionomique) et d'autres modules déduits pendant la recherche (la longueur de la tête, la hauteur du sternum et la profondeur du thorax). Les conclusions de cette étude se réfèrent au comportement en proportions des modules proposés, l'appréciation du développement du tronc, le dimorphisme sexuel des proportions concernant leur éloignement par rapport aux canons et les différences sexuelles significatives, la nouveauté et l'importance de l'étude.

Les modules choisis font en stature des proportions d'environ 10% avec des éloignements positifs et assez petits par rapport au canon de 1/10. Les proportions des hommes sont les plus approchées. Les proportions réalisées entre modules ont des valeurs comprises entre 92,5–104,71% et on enregistre une seule différence

significative d'éloignement au canon (94,03%,  $z = -1,31$ ) chez les femmes, concernant la proportion main/face (n'oublions la main plus courte des femmes du lot !). Arithmétiquement, les hommes font, en général, des différences plus grandes au canon que les femmes. En ce qui concerne les modules mis en proportion avec les largeurs du tronc, ceux font aussi des proportions approchées aux canons (en épaules  $\frac{1}{2}$ , en bassin et thorax  $\frac{2}{3}$ ). Ainsi, en épaules, chez les deux sexes, les valeurs des proportions sont comprises entre 46,44%–52,52%, les plus à une distance du canon ( $z$ ) qui ne dépasse  $\pm 1$ . Quoique chez les femmes se trouvent trois distances significatives mais de faible intensité, aussi chez celles-ci se trouvent les plus belles proportions: la longueur de la tête en épaules de 50,35% et la hauteur du sternum en bassin de 66,14%. Chez les hommes on remarque les proportions de la tête, face totale et sternum en bassin (entre 65,42–65,89%). La profondeur thoracique en largeur thoracique fait aussi, chez les deux sexes, des proportions approchées au canon de  $\frac{2}{3}$  et la distance réduit on confirme ( $z = 0,34$  et  $0,38$ ).

Le lot se caractérise par un bon développement du tronc concernant tant la comparaison aux données nationales et aux échelles anthropologiques de variation que par l'harmonie de ses largeurs par rapport aux canons. Les hommes ont des épaules significativement plus larges tandis que les femmes ont, aussi significativement, un bassin plus large et un tronc rectangulaire.

En ce qui concerne le dimorphisme sexuel des proportions avec les modules il faut préciser qu'il s'agit de deux situations: l'éloignement des valeurs moyennes par rapport aux canons ( $z$ ) et les différences entre celles-ci chez les deux sexes appréciées par des tests spéciales ( $t$ , indice de dimorphisme sexuel). Les hommes ont un certain avantage concernant l'éloignement aux canons, ayant moins de distances réduites significatives ( $z$ ) que les femmes (3: 8) et, d'autre part, par les plus de valeurs significativement ( $t$ ) plus grandes des proportions (9: 8). Sans compter la signification statistique, les femmes dépassent faiblement les hommes par les indices de dimorphisme sexuel  $> 100\%$  (13: 12).

L'importance des telles études est spécialement pratique du point de vue méthodologique en anthropologie biomédicale et pour d'évaluation du développement physique et esthétique, de la santé humaine et pour autres beaucoup aspects de la vie socio-culturelle.

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# PARENTAL AND PERINATAL FACTORS AND ASD: A ROMANIAN EXPLORATORY RESEARCH

LACRAMIOARA PETRE<sup>1</sup>, CRISTINA MARIA NEDELICU<sup>2</sup>

Autism spectrum disorder is a complex neurodevelopmental condition. High and low blood pressure, parental age, premature delivery, low weight birth, cesarean section, birth complications and neonatal intensive care were described in scientific literature as potential risk factors for ASD.

**Material and method:** 102 children born between 2009 and 2014 were included in the studied group. We analyzed gender, types of diagnostic, parental age and level of education, birth order of ASD child, types of child delivery, and obstetrical complications during birth.

**Results:** 49% of mothers were over 31 years old when they gave birth to children in our study group. 36.27% of fathers were over 36 years old at childbirth, and 16.67% of them were even over 41 years old. 69 children (67.6%) are the firstborn and 79.42% of children suffered birth complications.

Further researches and data analysis are needed to understand the risk factors for ASD.

**Keywords:** autism, parental age, perinatal risk factors.

## INTRODUCTION

Autism spectrum disorder (ASD) is a complex neurodevelopmental condition. Based on the 5th edition of Diagnostic Statistical Manual of Mental Disorders (DSM-5), specific diagnostic criteria for childhood autism include social skills and communication deficit associated with restrictive and repetitive behaviors, interests, or activities (American Psychiatric Association, 2013).

Epidemiological surveys of the prevalence of pervasive developmental disorders (PDDs), including autistic disorder (AD) worldwide show there is a high variation in prevalence proportions that ranged from a low 30.0/10 000 to a high of 116.1/10 000,

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with a median rate of 61.9/10 000 in Europe. In a global view, it was estimated a median of 17/10 000 for AD and 62/10 000 for all PDDs combined. This is currently the best estimate for the global mean prevalence of PDDs available and it translates into one child out of 160 with a PDD (Elsabbagh et al. 2012).

The main cause of ASD is genetic. However, in search of specific genes responsible for ASD it became obvious that there are numerous candidate genes on many chromosomes, and only rare cases of ASD can be related to specific genes. The spectrum of symptoms and the extreme complexity in the developmental and associated medical conditions within ASD do not necessarily mean a single etiology. Several hypotheses concerning the pathogenesis have been proposed, including the interaction of environmental factors and various genetic predispositions. Autism may represent a heterogeneous entity, where in some cases genetic factors, and in other cases environmental factors, may predispose to the disorder.

A recent study suggests that genetic factors account for only 35–40% of the cases, the rest 60–65% is likely due to many environmental factors, such as prenatal, perinatal and postnatal factors (Froelich-Santino et al. 2014). Maternal infections, gestational diabetes, high and low blood pressure, parental age, premature delivery, low weight birth, low Apgar score at 1 or 5 minute after birth, cesarean section, drugs used by mother during pregnancy, birth complications and neonatal intensive care unit treatment were described in scientific literature as potential risk factors for ASD.

According to many studies, adverse intrauterine environment resulting from maternal bacterial and viral infections during pregnancy is a significant factor for ASD. Hadjkacem et al. (2016) found that the occurrence of maternal infection was higher among ASD children when compared to controls (12%, respectively 3.9%) (Hadjkacem et al. 2016).

Another risk factor associated with disturbed fetal growth and increased rate of a variety of pregnancy complications is gestational diabetes. It also affects fine and gross motor development and increases the rate of learning difficulties and attention deficit disorder, a common comorbid behavioral problem in ASD (Ornoy et al. 2001).

Recent studies have linked advanced maternal and paternal age to increased risk for ASDs (Parner et al. 2012, Sandin et al. 2012).

Theories advocating the association between parental age and increased risk for ASDs include the potential for more genetic mutations in the gametes of older fathers and mothers, as well as a less favorable in utero environment in older mothers, with more obstetrical complications such as low birth weight, prematurity, and cerebral hypoxia (Parner et al. 2012). The interrelationship between autism and obstetric complications may be confounded by the influence of birth order. That is, obstetric complications may be more frequent in firstborn children-in families with 2 children, or in late born children-in families with at least 3 or 4 children (Glasson et al. 2004).

Fetal hypoxia is one of the manifestations of fetal distress and has been reported to induce conditions such as placental abruption, threatened premature delivery, emergency cesarean section, forceps delivery, spontaneous abortion, and varying degrees of cerebral damage (Gomes et al. 2015, Gardener et al. 2011).

Glasson et al. (2004) found that induced labor is associated with the risk for ASD. The interpretation of this finding remains challenging because the indications for induction of labor are multiple. Bilder et al. (2009) have shown that both breech presentation and cesarean delivery are associated with ASD, but the association with cesarean delivery was lost after excluding the children in which breech presentation was an indication for the operation.

In one study from Finland, ASD was associated with cesarean delivery but not with breech presentation. In the final model, only planned cesarean delivery (an operation scheduled before the labor starts), but not emergency/urgent cesarean, remained significant (Polo-Kantola et al. 2014).

Another birth factor associated with ASD is preterm delivery. Johnson et al. (2010) studied children who were born at <26 weeks of gestation and compared them with term-born classmates at 11 years of age. In this study, 16/201 (8%) of the preterm children were diagnosed with ASD, and none of the classmates received an ASD diagnosis.

Kuzniewicz et al. (2014) found that among infants <34 weeks gestational age, ventilation and intracranial hemorrhage were more frequent and associated with ASD. Also, ASD was 3 times more prevalent in infants with a gestational age smaller than 27 weeks compared with the term infants. Furthermore, each week of shorter gestation was associated with an increased risk of ASD.

The present study aims to explore some of the parental and obstetrical risk factors for ASD presented in the literature on a Romanian lot of ASD children to point out the importance of these factors in the etiology of autism.

## MATERIAL AND METHOD

The studied group includes 102 children born between 2009 and 2014, of which 19 girls (18.63%) and 83 boys (81.37%).

Children were diagnosed with autism by psychiatrists from the public health system in our country. Their medical diagnosis was also confirmed by specific psychological tests that measured the abilities and deficiencies of the subjects in several areas of development (ADOS 2).

The research was conducted between 2016–2017 in a therapy center in Bucharest. The research team was composed of one psychologist, anthropologist, physician, and special education professionals who implemented a questionnaire with personal data of parents and children, data on pregnancy, birth and first year of life, medical diagnoses, and specific psychological tests (ASRS, ADOS 2).

For this paper, we analyze gender, types of diagnostic, parental age and level of education, birth order of ASD child, types of child delivery (full-term, preterm, natural birth, cesarean section birth), and obstetrical complications during birth.

## RESULTS

**Gender.** The studied group consists of 19 girls (18.63%) and 83 boys (81.37%), which verifies the data from the literature on the sex ratio regarding the incidence of autism in children (1/4).

**Diagnostic.** Depending on the year of diagnosis and the vision of DSM in that period, as well as the severity of the condition, diagnoses range from autism spectrum disorder (ASD) (39.22% of children), atypical autism (23.53% of children), autism infantile (29.41% of children) and PDD-NOS (7.84% of children).

**Parental age.** Figure 1 shows the distribution of parental age at the moment of birth. It indicates that the rate of advanced age ( $\geq 35$  years) among ASD children's parents at the moment of birth is high (13.7 % of mothers and 36.2% of fathers).

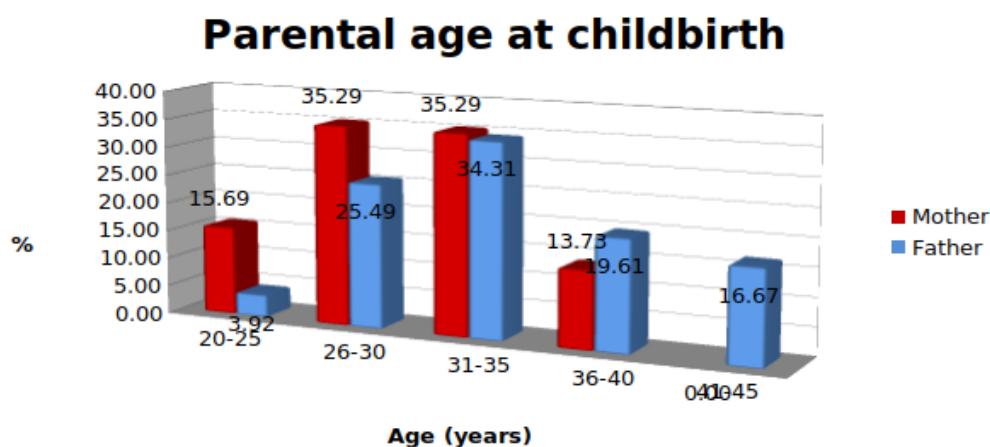


Fig. 1. Parental age at childbirth.

The average age at childbirth is 30.60 years for the mother and 34.07 years for the father. 35.29% of mothers gave birth between the ages of 31 and 35.

49% of mothers were over 31 years old when they gave birth to children in our study group.

36.27% of fathers were over 36 years old at childbirth, and 16.67% of them were even over 41 years old.

The literature shows that the advanced age of the parents at the time of conception, especially of the father, is associated with an increased risk of ASD and the results of our study confirm these data.

**Educational level.** 70.59% of fathers and 60.78% of mothers involved in this study had a higher education levels (more than a high school education). (Table 1)

Table 1

Educational level of parents

| Educational level | Mother (N) | Father (N) | Mother (%) | Father (%) |
|-------------------|------------|------------|------------|------------|
| Gymnasium         | 3          | 2          | 2.94       | 1.96       |
| High school       | 37         | 28         | 36.27      | 27.45      |
| Higher education  | 62         | 72         | 60.78      | 70.59      |

**Birth order of ASD child.** In the studied group (102 children with ASD), 69 children (67.6%) are the firstborn. 31 children (30.39%) are second born and only two are the third (Figure 2).

### Birth order of ASD child

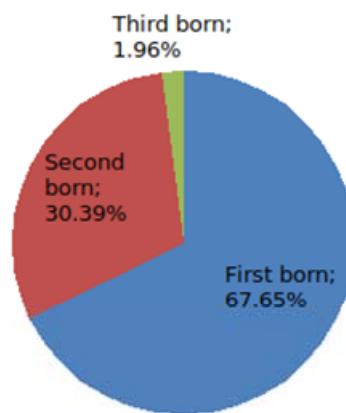


Fig. 2. Birth order of ASD children.

**Birth types.** 33.33% of the children in our study group were born prematurely.

Of these, 11 were born naturally (32.35%), the remaining 23 (67.65%) were born by cesarean section.

Of the 68 full-term babies, only 19 were born naturally (27.94%), the remaining 72.06% were born by cesarean section (Figure 3).

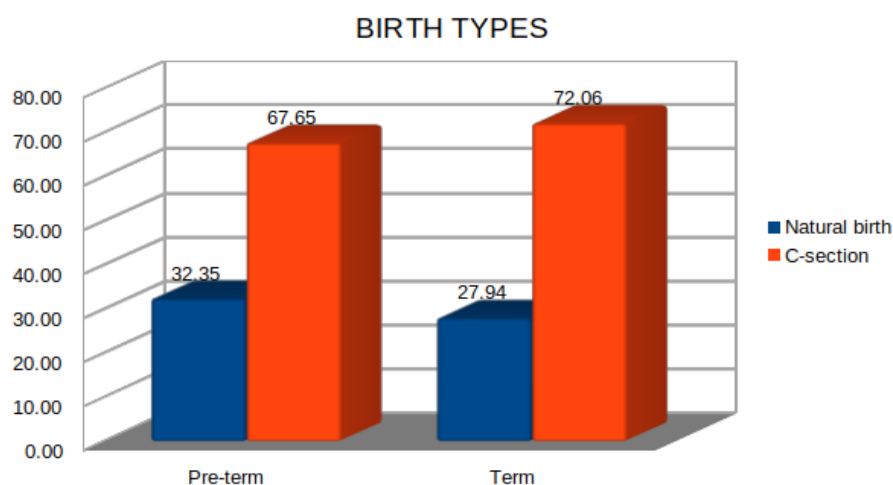


Fig. 3. Birth types.

To understand better the correlation between maternal age and the type of child delivery, we represent the data in Figure 4. As you can see, at every age interval, the cesarean delivery in this group of study is higher than 50%. 75% of child delivery in 31–35 years interval were cesarean and only 25% were natural birth. Over 50% of the births needed a cesarean intervention in the entire studied lot, and for the mothers who delivered the children after the age of 30 years, the C-section was needed in over 70% of the cases.

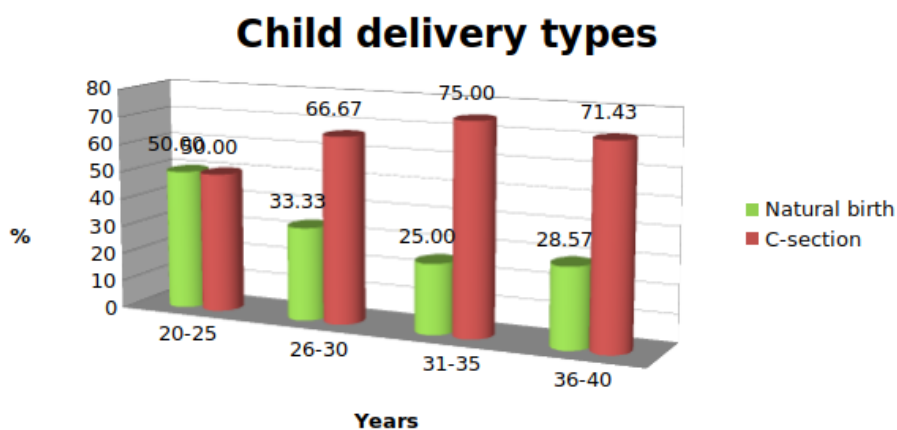


Fig. 4. Child delivery types on mothers age.

**Birth complications.** 79.42% of children suffered birth complications such as acute fetal stress, hypoxia, green amniotic fluids, prematurity, induced labor, difficult labor, and emergency cesarean intervention.

## DISCUSSION

Our findings confirmed the sex ratio of 1 girl to 4 boys affected by ASD.

The concern about the increasing rate of the advanced age at childbirth of ASD children worldwide is confirmed by our findings. The average age at childbirth is 30.60 years for the mother. Recent research in literature found a direct association between the advanced age of mother or father and the ASD and/or other diseases. Also, few researchers suggested that birth order is a risk factor for autism, especially in the case of the firstborn or the last born. And in our study, 67.65% of studied children were firstborn. There is a subject of further research if a combined factor, such as an advanced age of mother and/or father at the moment of conception of the first child is not an increasing risk factor for the contemporary population. The higher level of parents' education in this study group (found in some other studies in scientific literature, too) is linked with the advanced age of parents at the firstborn, because they need more time to finalize their studies, to build a career, start a family. Of course, this hypothesis needs more research and discussions in the future, alongside a detailed analysis of many other risk factors and data collected in the original research.

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# ALIMENTATION SAINE OU DIÈTES TENDANCE? COUVERTURE MÉDIATIQUE DE LA NUTRITION EN ROUMANIE ET ALLEMAGNE

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Food and nutrition are topics constantly covered, in various forms, in the media, both in fiction and non-fiction areas. New approaches and associations have recently emerged in the media coverage of this broad issue, with topics such as healthy eating, sustainable nutrition, various dietary trends, risks associated with nutrition or, general speaking, lifestyles, treatment and attitudes towards animals intended for consumption, environmental damage, etc. currently representing themes addressed in the media as frequently as recipes, dietary recommendations, plant cultivation and animal husbandry, as well as traditional dishes and culinary habits. This paper presents the results of a comparative study on the media coverage of nutrition in Romania and Germany. The research, based on a content analysis of online thematic press articles from the two countries, covers a period of three years (2014–2016). The main research objectives pursued in the study are identifying the most relevant aspects regarding both the content and the form of media coverage of the topic of nutrition, and making comparisons in these respects. The paper particularly discusses the similarities and differences between the two countries as regards the media construction of the issue of food as a general concern.

**Keywords:** food, nutrition, media coverage, comparison, Romania, Germany.

## INTRODUCTION. CADRE THÉORIQUE DE L'ANALYSE

L'alimentation et la santé sont des sujets constamment couverts par les médias. L'intérêt des médias pour ces sujets s'est récemment diversifié, en identifiant de nouveaux problèmes et associations, tels que l'alimentation saine, les tendances alimentaires actuelles, la nutrition durable, les styles de vie équilibrés, les risques

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liés à la consommation de certains aliments, ou la manière dont l'environnement est affecté par l'ensemble du processus impliqué dans la nutrition humaine, en particulier par l'industrie alimentaire, l'agriculture et l'élevage.

L'alimentation et la nutrition sont présentes dans les médias, aussi bien dans les genres non fictifs que fictifs. Dans la première catégorie, en plus des productions médiatiques documentaires ou des reportages sur le lien entre nutrition et santé, sur la cuisine, les émissions de télévision et les concours gastronomiques, les conseils alimentaires, les recettes et les régimes alimentaires présentés dans les magazines etc., de nouveaux formats peuvent être retrouvés dans les médias d'aujourd'hui, tels que les programmes offrant conseils et informations nutritionnelles, ou les feuillets, où l'on suit les conséquences des régimes ou des diètes sur les volontaires, généralement des personnes en surpoids ou avec divers problèmes de santé. De plus, la prise de conscience de la nécessité d'accroître la durabilité dans tous les domaines a conduit à l'émergence de nouveaux thèmes médiatiques, tels que l'agriculture locale, les cultures biologiques, l'agriculture urbaine, l'agriculture biologique etc., y compris sous la forme de campagnes d'information.

En ce qui concerne la deuxième catégorie, on peut dire que la nourriture et tous les contextes requis par le processus d'alimentation sont omniprésents dans les films, séries et autres types de spectacles ou formats média fictifs. Contrairement aux formats non fictifs, qui jouent souvent un rôle d'information et même d'éducation, dans les genres fictifs, certains aliments nocifs, tels que certaines boissons gazeuses à teneur excessive en sucre, ou l'alcool, sinon présentés sous un jour positif, sont au moins vulgarisés comme tels et leur consommation est souvent valorisée. En plus de tout cela, la publicité et le commerce alimentaire à travers les médias restent encore un élément important de la couverture médiatique de l'alimentation et de la nutrition. Par son objet même, la publicité fait l'éloge des produits, y compris ceux à faible valeur nutritive, pour inciter les gens à les acheter, encourageant ainsi leur achat et leur consommation, et non le discernement, les comportements rationnels ou l'attention à la santé et à une alimentation saine.

La nutrition et l'alimentation génèrent actuellement de nouvelles formes d'engagement médiatique en les incluant comme sujets de discussion dans les médias sociaux, les sites de partage de photos et les applications mobiles. Les chercheurs dans le domaine de l'alimentation et du style de vie ont identifié des changements dans la façon dont les médias couvrent ces sujets, principalement en raison du consommateur et suite du développement de politiques publiques liées à l'alimentation et à la nutrition néolibérales, orientées vers les consommateurs<sup>1</sup>. Une grande partie de la littérature de ce domaine a porté sur la nutrition personnelle et

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<sup>1</sup> T. Miller, *Cultural citizenship: Cosmopolitanism, consumerism, and television in a neoliberal age*, Temple University Press, 2007; T. Lewis, "Transforming citizens? Green politics and ethical consumption on lifestyle television", *Continuum: Journal of Media & Cultural Studies*, 2008, 22 (2): 227–240.

les pratiques alimentaires des consommateurs<sup>2</sup> et sur la manière dont elles sont formulées et couvertes dans les médias<sup>3</sup>. De telles études ont pris en compte à la fois les nouvelles stratégies de consommation qui vont au-delà des systèmes d'alimentation conventionnels et s'intéressent à l'impact de la nutrition et des aliments sur la santé, l'environnement et le bien-être des animaux, ainsi que les pratiques alimentaires et de style de vie impliquées dans l'achat, la préparation, la consommation et l'élimination des aliments.

En même temps, certains chercheurs ont souligné le fait que certaines présentations de la nutrition et de l'alimentation dans les médias comportent des inexactitudes<sup>4</sup> ou sont incomplètes et tendancieuses<sup>5</sup>. D'autres études attirent l'attention sur le fait que la couverture médiatique de la nutrition est souvent sensationnelle, en utilisant des titres qui ne reflètent pas correctement l'essence de la recherche scientifique présentée<sup>6</sup>. Des informations contradictoires ou des opinions déséquilibrées sur la santé et la nutrition sont également souvent fournies<sup>7</sup>. Les éventuelles inexactitudes et le manque de contextualisation sont donc les éléments clés qui remettent en cause la valeur des informations médiatiques liées à l'alimentation et à la santé<sup>8</sup>. Cependant, certains auteurs soulignent<sup>9</sup> le fait que le

<sup>2</sup> J. Johnston, S. Baumann, *Foodies: Democracy and distinction in the gourmet foodscape*, New York: Routledge, 2010; J. Leer, K. Klitgaard Povlsen, *Food and media: Practices, distinctions and heterotopias*, London: Routledge, 2016.

<sup>3</sup> P. Bradley, *Food, media and contemporary culture: The edible image*, Houndmills: Palgrave Macmillan, 2016; C. Lavin, *Eating anxiety: The perils of food politics*, Minneapolis: University of Minnesota Press, 2013.

<sup>4</sup> L. Henderson, J. Kitzinger, J. Green, "Representing infant feeding: Content analysis of British media portrayals of bottle feeding and breast feeding", *British Medical Journal*, 2000, 321: 1196–1198; G. Philo, J. Secker, S. Platt, L. Henderson, G. McLaughlin, J. Burnside, "The impact of the mass media on public images of mental illness: Media content and audience belief", *Health Education Journal*, 1994, 53 (3): 271–281.

<sup>5</sup> J. E. Stryker, "Reporting medical information: Effects of press releases and newsworthiness on medical journal articles' visibility in the news media", *Preventive medicine*, 2002, 35 (5): 519–530.

<sup>6</sup> C. Bartlett, J. Sterne, M. Egger, "What is newsworthy? Longitudinal study of the reporting of medical research in two British newspapers", *British Medical Journal*, 2002, 325: 81–84; A. J. Basu, E. Hogard, "Fit for public consumption? An exploratory study of the reporting of nutrition research in UK tabloids with regard to its accuracy, and a preliminary investigation of public attitudes towards it", *Public Health Nutrition*, 2008, 11: 1124–1131.

<sup>7</sup> R. H. Nagler, "Adverse outcomes associated with media exposure to contradictory nutrition messages", *Journal of Health Communication*, 2014; 19 (1): 24–40; E. M. Hackman, G. L. Moe, "Evaluation of newspaper reports of nutrition-related research", *Journal of American Dietetic Association*, 1999, 99: 1564–1566.

<sup>8</sup> S. Sihota, L. Lennard, *Health literacy: Being able to make the most of health*, National Consumer Council, 2004.

<sup>9</sup> M. E. Len-Rios, A. Hinnant, S.A. Park, G. T. Cameron, C. M. Frisby, Y. Lee, "Health news agenda building: Journalists' perceptions of the role of public relations", *Journalism & Mass Communication Quarterly*, 2009, 86(2): 315–331; B. Nerlich, N. Koteyko, "Balancing food risks and food benefits: The coverage of probiotics in the UK national press", *Sociological Research Online*, 2008, 13(3)1.

rôle des médias en matière de santé, de nutrition et d'alimentation n'est pas de combler les lacunes des services de santé publique, mais seulement d'informer sur ces sujets.

Par conséquent, en ce qui concerne la couverture médiatique de l'alimentation et de la nutrition aujourd'hui, on peut retrouver des phénomènes différents, parfois contradictoires et / ou paradoxaux. D'une part, les questions de santé, ainsi que le lien entre la nutrition et la santé des individus et de la population<sup>10</sup>, sont traités sérieusement dans les médias, souvent avec inquiétude, les médias assumant fréquemment un rôle informatif et éducatif bien défini. À ce même propos, il y a des informations sur la valeur nutritionnelle des aliments, l'efficacité des régimes alimentaires, les processus impliqués dans la production et la consommation alimentaires, ou des sujets plus récents sur la nutrition durable, les aliments sains, le bien-être des animaux destinés à la consommation ou les dégâts environnementaux. D'un autre côté, on ne peut ignorer que, dans le même temps, les médias tentent constamment d'attirer l'attention sur les aliments et les boissons, y compris ceux reconnus comme "malsains", à travers le large éventail de délices culinaires et de tentations présentées en particulier grâce à la publicité, mais aussi à d'innombrables programmes de fiction et de non-fiction, dans lesquels la nourriture et les boissons sont omniprésentes. Ces contenus médiatiques sont d'ailleurs vus par certains chercheurs<sup>11</sup> comme l'une des principales causes de l'augmentation continue du nombre de personnes en surpoids et obèses.

Dans ce contexte, il convient également de mentionner les études, bien que beaucoup moins courantes en Europe par rapport aux États-Unis<sup>12</sup>, sur l'influence de la consommation des médias sur le comportement sanitaire de la population. La plupart de ces recherches visent, entre autres, à identifier les possibilités et les limites de l'éducation au domaine de la santé à travers les médias et à délimiter l'efficacité de la présentation de sujets de santé à la télévision, à la fois dans des genres non fictifs et fictifs.

## OBJET DE L'ÉTUDE ET MÉTHODOLOGIE

Cet article examine quelques résultats d'une analyse comparative sur la couverture médiatique des aliments en Roumanie et en Allemagne. Grâce à nos recherches, nous nous sommes intéressées, d'une part, à identifier les sujets qui intéressent les médias en relation avec le thème de la nutrition et la manière dont ils sont couverts, et d'autre part, à délimiter les similitudes et les différences entre les

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<sup>10</sup> H. Scherer, E. Link, "Gesundheitsthemen in den Medien", in C. Rossmann, M. Hastall (eds.), *Handbuch Gesundheitskommunikation*, Wiesbaden: Springer VS, 2017.

<sup>11</sup> R. Stange, C. Leitzmann (eds.), *Ernährung und Fasten als Therapie*, Berlin, Heidelberg: Springer Verlag, 2010; J. Raisborough, *Fat bodies, health and the media*, London: Palgrave Macmillan, 2016.

<sup>12</sup> H. Scherer, E. Link, *Op. cit.*

deux pays, en étudiant à la fois les sujets couverts, le contenu des articles et les aspects de la couverture médiatique.

L'étude a été fondée sur une analyse de contenu thématique, à la fois quantitative et qualitative<sup>13</sup> et a couvert une période de trois ans (2014–2016). Le corpus d'analyse a été représenté par les articles de presse parus dans les deux pays au cours de la période mentionnée, dans leur version en ligne, et qui ont couvert sous une forme ou autre le thème de l'alimentation et de la nutrition. Ainsi, 138 articles de presse des médias allemands et 80 articles des médias roumains ont été analysés. La grille d'analyse a été commune aux deux pays, ayant 45 éléments.

### RÉSULTATS ET DISCUSSIONS

Une première différence concernant les médias de nutrition en Roumanie et en Allemagne pendant la période mentionnée est constituée par le type de médias dans lesquels les articles ayant un tel sujet ont été publiés. Alors que, dans la presse roumaine, la plupart des articles au sujet de l'alimentation et de la nutrition ont été publiés par les sites Web de certaines chaînes de télévision et sur des sites Web agrégés (71% du total), c'est-à-dire des sites qui ne fournissent pas seulement des actualités, mais aussi diverses autres informations, dans la presse allemande, la plupart des articles sur l'alimentation ont été publiés dans les journaux (dans leur format en ligne) et sur les sites présentant des actualités (au total, 65% des articles allemands analysés).

La plupart des articles traitant du thème de la nutrition étaient, à la fois en Roumanie (57%) et en Allemagne (41%), des articles d'analyse, c'est-à-dire des articles qui fournissaient une approche plus détaillée du sujet, des analyses et parfois des points de vue du journaliste. Une différence significative entre les médias des deux pays est le fait que, alors que dans les médias allemands le genre journalistique des reportages est toujours prédominant (23% des articles sur la nutrition analysés étaient des reportages), dans les médias roumains il apparaît plutôt rarement (seulement 3% des articles roumains étaient des reportages).

Dans la plupart des cas, la nutrition était le sujet principal des articles, tant en Roumanie (91% du total) qu'en Allemagne (88% du total). Entre 2014 et 2016, d'autres sujets importants dans les médias en ligne ont été les risques associés à l'alimentation et à la nutrition, les régimes alimentaires, les maladies liées à l'alimentation et à la nutrition, l'alimentation et la nourriture liées à une certaine maladie ou affection, ainsi que la nourriture (en général ou un certain produit alimentaire). Dans des articles allemands, nous avons également retrouvé des sujets

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<sup>13</sup> K. Krippendorff, *Content analysis: An introduction to its methodology*, 4th ed. Los Angeles, London, New Delhi, Singapore: Sage Publications, 2018; M. Vaismoradi, H. Turunen, T. Bondas, "Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study", *Nursing and Health Sciences*, 2013, 15: 398–405.

d'actualité tels que la durabilité de la production alimentaire, les entreprises alimentaires à grande échelle, la déforestation / sécheresse / érosion des sols et d'autres problèmes environnementaux, le réchauffement climatique et le changement climatique liés à la production alimentaire, la pollution, etc., sujets qui n'ont jamais été couverts par la presse roumaine pendant la période considérée, bien que ces phénomènes constituent actuellement des problèmes sociaux et environnementaux majeurs en Roumanie aussi. En revanche, dans les articles roumains sur la nutrition, des sujets tels que la quantité de nourriture, voire la nourriture en relation avec certaines fêtes spécifiques, nationales ou religieuses, ont été couverts plus souvent que dans les médias allemands. Il convient également de noter que ni la presse allemande ni la presse roumaine n'ont jamais abordé, pendant trois ans, les questions liées aux taxes sur la malbouffe / alcool / tabac, ni la question du système juridique international / européen sur la nutrition et l'alimentation saine.

En ce qui concerne la présence de certains produits alimentaires dans le texte des articles, la situation dans les médias en ligne en Roumanie et en Allemagne était similaire: la nourriture était présente aussi bien dans 91% des articles roumains et 91% des articles allemands. Les produits diététiques et non diététiques étaient couverts de façon comparable dans les articles des deux pays (76% dans les médias allemands, et 64% dans les médias roumains). Les produits diététiques les plus couverts étaient, en Roumanie et en Allemagne, les légumes, les légumineuses et leurs dérivés sans sucre et sel, les fruits et leurs dérivés sans sucre. En revanche, les produits non diététiques les plus couverts dans les deux pays étaient la viande et ses dérivés tels que les saucisses, les hamburgers, les boulettes de viande, etc (surtout en Allemagne), les produits laitiers riches en matières grasses, le sucre, les édulcorants, le chocolat, les desserts sucrés et les pâtisseries.

Il faut mentionner aussi que, à l'exception du thé, plus souvent mentionné dans les articles allemands, d'autres aliments tels que le café, les graisses, les suppléments nutritionnels et les épices ont été couverts plus intensément dans les médias roumains. Par exemple, les épices étaient environ huit fois plus présentes dans les articles roumains qu'en Allemagne, et les graisses et le café étaient deux fois plus médiatisés dans la presse roumaine en ligne qu'en Allemagne.

Un autre point d'intérêt de notre étude était l'analyse de la mesure dans laquelle les questions controversées étaient traitées ou mentionnées dans les articles sur l'alimentation en Roumanie et en Allemagne. Selon les résultats de nos recherches, les médias allemands ont traité, par rapport aux médias roumains, des questions plus fréquemment controversées relatives à la nutrition et à l'alimentation. De manière significative, plus de la moitié des articles allemands (64%) présentent ou au moins mentionnent une question controversée, alors que seulement 44% environ des articles roumains optent pour une démarche pareille.

Les problèmes les plus controversés identifiés dans les articles sur la nutrition concernaient, tant en Roumanie qu'en Allemagne, les problèmes de santé et tout ce qui les concerne (maintien de la santé, conditions médicales, maladies, etc.), ainsi

que certains problèmes sociaux. Non seulement les questions les plus controversées étaient présentées dans les articles allemands, mais des questions beaucoup plus diverses. Certains aspects rarement couverts par les articles roumains, tels que ceux liés aux risques et à la sécurité des consommateurs d'aliments (présents uniquement dans trois articles roumains analysés), ont souvent été abordés dans les médias allemands (dans 39 articles). En revanche, des aspects liés à l'industrie alimentaire, aux questions éthiques et environnementales, dont les éléments controversés ont été discuté assez fréquemment par les médias allemands, n'ont jamais été débattus ou pris en compte par les médias roumains.

Parmi les problèmes controversés les plus courants retrouvés dans les médias allemands, en ce qui concerne à la fois la santé des consommateurs et les risques encourus, on compte les différents régimes alimentaires et modes de consommation, tels que les régimes végan, végétariens, paléo, sans gluten, etc. Ces régimes et leur mode de vie associé ont été discutés dans les médias allemands non seulement en tant que problèmes médicaux liés à la nutrition, mais aussi en tant que problèmes sociaux et éthiques, vu la tendance sociale de les adopter, plutôt que leur côté de nécessité médicale. En plus des questions controversées liées à la santé, des risques pour les consommateurs, des questions sociales et éthiques, les médias allemands ont également discuté des situations controversées liées à l'influence – risques et dommages – sur l'environnement de certains styles de vie, en particulier "occidentaux", qui impliquent certaines habitudes et pratiques néfastes. En outre, il y a eu des articles qui ont marqué des liens plus étroits entre la nutrition, le mode de vie, l'espérance de vie moyenne, l'incidence de certaines maladies, les traitements et les coûts impliqués, non seulement d'un point de vue médical, social et économique, mais aussi en ce qui concerne l'impact sur l'environnement et la planète. Bien qu'en Roumanie, il existe également de tels risques pour l'environnement, liés non seulement aux pratiques et aux habitudes alimentaires, mais aussi à la production alimentaire elle-même, et le lien entre la nutrition, le mode de vie et les dommages environnementaux pourrait également être discuté, aucun article de la presse roumaine n'a abordé ces questions en trois ans.

## CONCLUSIONS

Un certain nombre d'aspects de nutrition ont été couverts au cours de la période considérée dans les médias allemands et roumains. Ceux-ci incluent le rôle de la nutrition par rapport à la santé, la valeur nutritionnelle des aliments, les risques liés à la nutrition, divers aspects éducatifs et informatifs concernant l'alimentation et la nutrition, etc. D'autre part, notre analyse a également mis en évidence l'existence de différences majeures entre les préoccupations des médias dans les deux pays par rapport aux problèmes liés au sujet de la nutrition. Alors que les journalistes allemands se préoccupent davantage de différents régimes alimentaires, tendances alimentaires et styles de vie, des avantages par rapport aux préjugés qui leur sont

associés, des risques de la production alimentaire sur l'environnement, mais aussi des règles gouvernementales en matière d'alimentation et / ou de nutrition, les journalistes roumains se sont davantage préoccupés de questions spécifiques, telles que la quantité de nourriture et de nutrition liée à certaines fêtes, ou les règles de santé et d'hygiène relatives aux aliments et à la nutrition, y compris les aliments et la préparation des aliments, l'emballage et l'étiquetage des aliments.

Une conclusion importante que l'on peut tirer sur la base des résultats de notre étude est que les médias allemands ont couvert, par rapport aux médias roumains, des problèmes beaucoup plus souvent controversés liés à la nutrition et à l'alimentation. De plus, les questions controversées abordées dans la presse allemande se sont concentrées sur des domaines beaucoup plus divers que ceux publiés par la presse roumaine. Les médias des deux pays ont mentionné des questions controversées au sujet de la santé humaine et des aspects sociaux. Cependant, les médias allemands ont également couvert un certain nombre d'aspects controversés qui ont été peu ou pas pris en compte par les médias roumains, telles que ceux liés aux risques et à la sécurité des consommateurs, à l'industrie alimentaire, des questions éthiques et environnementales.

En conclusion, à travers l'analyse comparative de la couverture médiatique des problèmes de nutrition en Roumanie et en Allemagne, nous avons pu constater à la fois certaines similitudes et un certain nombre de différences. Si les similitudes se réfèrent principalement à l'approche de certains sujets couverts, notamment par le biais des articles d'analyse, ainsi qu'à certaines préoccupations ou éléments mentionnés retrouvés dans la presse des deux pays, les différences sont principalement dues au contenu des articles et à son analyse approfondie, qui ne révèle pas seulement des différences d'intérêt, de nuance et d'approche entre les médias roumains et allemands, mais aussi des différences en termes d'implication des journalistes et d'attitude de la presse sur les questions d'actualité, pressantes ou d'intérêt général, y compris au regard des rôles assumés par les journalistes, d'informer, de couvrir des aspects controversés, de se lancer dans des argumentations critiques et même d'éduquer le public – attitudes journalistiques identifiées dans les médias allemands, mais pas en Roumanie.

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# DIFFÉRENCE ETHNIQUE DE L'ÉPAISSEUR DES TISSUS MOUS DU VISAGE CHEZ DES SUJETS NON TRAITÉS

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L'objectif était de comparer les épaisseurs des tissus mous du visage de deux groupes de filles ivoiriennes et libanaises résidant en Abidjan. Cette étude transversale et analytique, a porté sur des radiographies de 66 patientes (34 filles ivoiriennes et 32 filles libanaises) de 11 à 16 ans, classe I squelettique et normodivergents. 24 points de repères céphalométriques ont permis la définition de 12 mesures d'épaisseurs des tissus mous. La normalité de la distribution des données a été vérifiée à travers les tests de Kolmogorov-Smirnov et Shapiro-Wilk. La distribution étant normale, le test de student sur séries indépendantes (seuil de signification à 0,05%) a permis de comparer les épaisseurs des tissus mous des deux groupes de sujets. Les caractéristiques différentielles traduisent chez les ivoiriennes, des épaisseurs de tissus mous plus importantes aux points Glabellae, Rhinion, Labial supérieur et inférieur, Supramental, Pogonion, Gnathion et Menton. Par contre, aux points Pronasal et Sous-nasal, les épaisseurs sont plus importantes chez les libanaises. Les ivoiriennes sont caractérisées par un nez plathirien, ainsi qu'une importante épaisseur des tissus mous du tiers facial inférieur. Aussi, chez les libanaises, la proéminence du nez, est notable.

**Mots-clés :** céphalométrie, épaisseur des tissus mous, groupes ethniques, profil cutané facial.

## INTRODUCTION

La détermination des caractéristiques céphalométriques propres à des populations humaines spécifiques est capitale en anthropologie médico-légale, dans la mesure où la tête est la partie du corps qui présente les particularités morphologiques les

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plus expressives pour différencier les populations humaines (Bagwan et al. 2015). Cependant, s'il paraît aisé pour les anthropologues légistes de déterminer le sexe, l'âge et l'origine ethnique des individus à partir du squelette crânien, la reconnaissance formelle des visages semble buter contre de nombreux écueils. C'est ainsi que, lorsque les méthodes classiques s'avèrent infructueuses, les anthropologues légistes ont recours généralement à la reconstruction faciale pour déterminer l'apparence du visage d'une victime à partir du crâne (Yoshino et al. 1997).

D'une manière générale, la physionomie faciale est fortement influencée par la forme et les dimensions du squelette sous-jacent (Fitz, 1981), et il existe un lien très étroit entre les reliefs osseux et les couches des tissus mous (Gervasi, 2010). Par conséquent, la reconstruction faciale (ou approximation faciale) utilise les épaisseurs tissulaires moyennes en des points anthropologiques crâniens et faciaux pour reconstituer le visage. Toute chose qui confère aux épaisseurs des tissus mous du visage, un caractère prépondérant dans les procédés de reconstruction faciale, comme le traduisent si bien Rhine et al. (1984) à travers les tables références pour la reconstruction faciale basée sur divers groupes ethniques aux Etats-Unis et en Europe.

Dans une perspective similaire, la littérature scientifique donne la possibilité d'observer depuis quelques années, la mise en évidence de données de plus en plus importantes, relativement aux standards d'épaisseurs des tissus mous spécifiques aux populations de divers pays. Ainsi, chez une population d'adultes chinois, Dong et al. (2012) ont noté que les femmes se caractérisaient par des épaisseurs de tissus mous plus importantes au niveau de la plupart des repères anthropométriques. De même, chez un groupe d'enfants japonais présentant différentes classes squelettiques, Utsuno et al. (2010) ont observé que les épaisseurs des tissus mous variaient selon le type de relation maxillo-mandibulaire. Aussi, chez les femmes adultes mélanodermes Sud-africaines, Cavanagh et al. (2011) ont montré que les épaisseurs des tissus mous du visage présentaient des différences significativement plus importantes à celles des femmes mélanodermes américaines.

De ce qui précède, nous constatons à travers ces travaux portant sur diverses populations humaines que, les épaisseurs des tissus mous du visage variaient selon l'origine ethnique, le sexe, l'âge et la classe squelettique. Cependant, à ce jour, il ne nous semble pas avoir trouvé trace dans la littérature d'une étude portant sur la comparaison de sujets mélanodermes ivoiriens et diasporas étrangères, en l'occurrence leuco-libanaise. D'où l'objectif de cette étude qui était de comparer les épaisseurs des tissus mous faciaux des filles ivoiriennes et libanaises présentant des caractéristiques dento-squelettiques normales.

## MATERIELS ET METHODES

La présente étude, de type transversale et analytique, a porté sur des clichés de radiologie numérique issus des dossiers médicaux de 66 patientes (34 filles ivoiriennes et 32 filles libanaises) de 11 à 16 ans, en première consultation orthodontique.

Ces radiographies standardisées et calibrées selon les normes de la céphalométrie clinique, ont toutes été produites par le service de radiologie de la PISAM (Polyclinique Sainte Anne-Marie) d'Abidjan. L'unité de radiologie numérique de cette structure était équipée d'un appareil de marque CRANEX Excel Ceph®, pourvu d'un céphalostat rotatif, donc permettant des acquisitions en incidence normalatéralis, norma-frontalis (dans le sens antéro-postérieur) et des radiographies panoramiques (dans le sens postéro-antérieur). Les images radiologiques étaient imprimées sur un film AGFA numérique (8 × 10 Inch) exposé à un courant électrique d'une puissance de 80 Kvp. La distance focale en usage dans ce centre était de 2 m, tandis que la distance source-cassette était 50 cm. Ainsi, les sujets en posture cervicale neutre, les dents en intercuspidation maximale, les lèvres jointes, avaient la tête parfaitement orientée dans le plan horizontal de Frankfort et immobilisée dans le céphalostat en rotation frontale, perpendiculairement à la source d'émission du rayonnement X.

Sur un ensemble de 500 dossiers médicaux consultés, une sélection rigoureuse a été effectuée. D'abord, les radiographies extraites ont été triées en fonction de leur exploitabilité, en retenant celles qui présentaient un meilleur contraste d'image et dont les fiches de renseignements complémentaires indiquaient une bi-parentalité ivoirienne (pour les ivoiriens) et libanaise (pour les libanais) (N = 350). Ensuite, parmi ces clichés, ceux des patients dont l'âge était inclus entre 11 et 16 ans, en première consultation et n'ayant auparavant subi aucune intervention d'ordre orthodontique, ont été retenus (N = 250). A la suite de ces premiers niveaux de sélections, un ensemble de tracés céphalométriques sur papier acétate à la lueur de l'éclairage du négatoscope, a permis de mesurer les angles ANB (position du maxillaire par rapport à la mandibule) et FMA (direction de croissance du squelette facial). 66 sujets (34 filles ivoiriennes et 32 filles libanaises) de classe I squelettique et normodivergentes ont été retenus (figure 1).

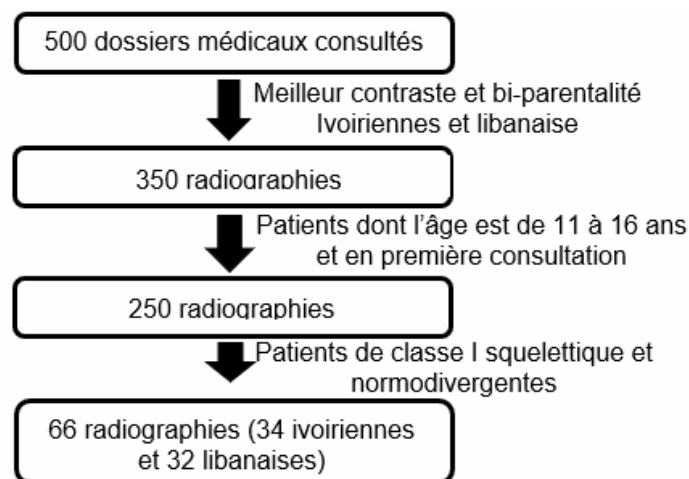


Fig. 1. Diagramme de flux pour la sélection des sujets.

Les tracés réalisés sur les radiographies sélectionnées ont servi à une analyse céphalométrique plus globale, par la matérialisation de la verticale vraie (TVL = True vertical line) et l'horizontale vraie (THL = True horizontal line). Les tracés céphalométriques ont été réalisés avec un crayon 3H pointu sur du papier à l'acétate de 0,5  $\mu\text{m}$  d'épaisseur éclairé avec un négastoscope. A partir de ces tracés, 24 points de repères céphalométriques (12 sur le profil cutané, 12 sur la structure osseuse) ont été localisés (figure 2) et 12 mesures d'épaisseurs des tissus mous ont été réalisées à la main à l'aide d'une règle céphalométrique adaptée à ce type de travail (figure 3).

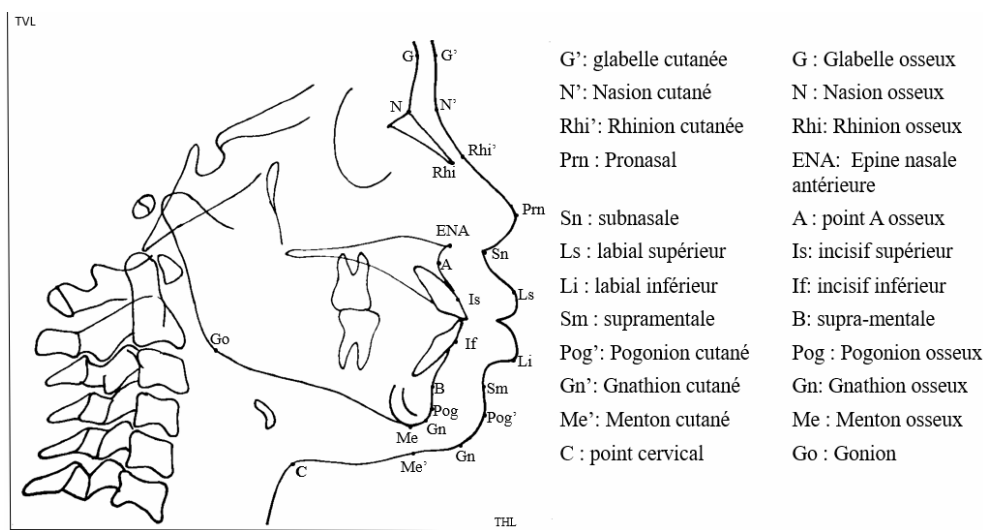


Fig. 2. Points de repères céphalométriques utilisés.

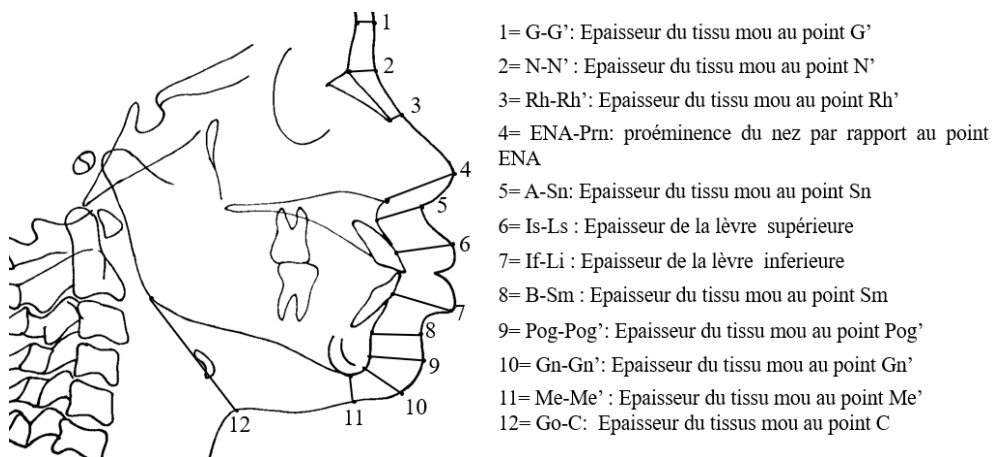


Fig. 3. Mesures d'épaisseurs des tissus mous du visage.

Les données céphalométriques recueillies ont été enregistrées sur une page Excel du système d'exploitation Windows 2010, en vue de leur analyse statistique au moyen du logiciel IBM SPSS 20.0 pour Windows. Mais au préalable, la fiabilité et la reproductibilité des données obtenues a été vérifiées à travers leur reprise, par le même opérateur, sur 20 radiographies sélectionnées au hasard (test du nombre au hasard par application de la table du nombre au hasard de Babington Smith et Kendall à la liste des sujets) 2 semaines plus tard. Le calcul d'erreur de mesure a ensuite été effectué, en utilisant la méthode d'erreur proposée par Dahlberg (1940) où  $Me = \sqrt{\Sigma d^2 / 2n}$  ( $d$  est la différence entre les premières mesures et les deuxièmes mesures et  $n$  le nombre de personnes tirées au hasard). Une analyse statistique descriptive a permis de déterminer les moyennes de valeurs relatives aux caractéristiques d'épaisseurs des tissus mous du profil cutané facial chez les filles ivoiriennes et libanaises. Le  $t$  de student sur séries indépendantes (seuil signification 0,05%) a été utilisé pour comparer les deux groupes de sujets féminins (Tableau I).

Tableau I

Méthode d'erreur des mesures d'épaisseur de tissu mou selon la formule de DAHLBERG

| Variables (mm) | Méthode d'erreur |
|----------------|------------------|
| G-G'           | 0,316            |
| N-N'           | 1,423            |
| Rh-Rh'         | 0,316            |
| ENA-Prn        | 0,790            |
| A-Sn           | 0,632            |
| Is-Ls          | 0,948            |
| If-Li          | 1,106            |
| B-Sm           | 0,790            |
| Pog-Pog'       | 0,632            |
| Gn-Gn'         | 0,948            |
| Me-Me'         | 0,632            |
| Go-C           | 2,055            |

## RESULTATS

Les erreurs systématiques de mesures, faibles, variaient entre 0,316 mm (valeur minimale) et 2,055 mm (valeur maximale). Les mesures réalisées dans cette étude présentent donc, dans l'ensemble, une cohérence et une précision acceptables.

L'analyse comparative des épaisseurs des tissus mous du visage entre filles mélanodermes ivoiriennes et leucodermes libanaises met en évidence des caractéristiques différentielles bien tranchées (11 variables sur un total de 12, présentent des différences

statistiquement significatives). Ces caractéristiques différentielles traduisent chez les filles ivoiriennes des épaisseurs de tissus mous plus importantes au niveau des points Glabell (0,002), Rhinion (0,0001), Labial supérieur (0,025), Labial inférieur (0,0001), supramental (0,000), Pogonion (0,0001), Gnathion (0,001) et Menton (0,001). Par contre, ces tissus mous présentent de faibles épaisseurs au niveau du point Pronasal (0,000) et Sous-nasal (0,000). Les épaisseurs des tissus mous au niveau de ces derniers points sont plus importantes chez les filles libanaises.

Tableau II

Comparaison des épaisseurs des tissus mous chez les Ivoiriennes et les Libanaises

| Variables | Ivoiriennes (n = 34) |            |          | Libanaises (n = 32) |            |          | P value  |
|-----------|----------------------|------------|----------|---------------------|------------|----------|----------|
|           | Moyennes             | Ecart-type | Mini-max | Moyennes            | Ecart-type | Mini-max |          |
| G-G'      | 06,441               | 1,440      | 04–11    | 05,438              | 1,076      | 03–07    | 0,002*   |
| N-N'      | 06,412               | 1,438      | 04–09    | 06,375              | 1,408      | 04–09    | 0,917 NS |
| Rh-Rh'    | 03,676               | 1,590      | 01–10    | 02,344              | 0,745      | 01–04    | 0,0001*  |
| ENA-Prn   | 22,118               | 2,804      | 17–27    | 25,406              | 3,662      | 19–33    | 0,000*   |
| A-Sn      | 12,882               | 1,822      | 10–15    | 15,125              | 2,882      | 09–22    | 0,000*   |
| Is-Ls     | 13,529               | 2,299      | 08–19    | 12,063              | 2,862      | 06–18    | 0,025*   |
| If-Li     | 15,559               | 2,092      | 12–19    | 12,875              | 2,196      | 09–17    | 0,0001*  |
| B-Sm      | 13,206               | 2,683      | 09–20    | 10,938              | 1,813      | 08–16    | 0,000*   |
| Pog-Pog'  | 13,882               | 2,614      | 09–20    | 11,063              | 2,651      | 03–16    | 0,0001*  |
| Gn-Gn'    | 10,853               | 2,945      | 06–17    | 08,438              | 2,627      | 02–14    | 0,001*   |
| Me-Me'    | 08,824               | 2,758      | 05–16    | 06,625              | 2,446      | 02–12    | 0,001*   |
| C-Go      | 47,235               | 7,002      | 31–67    | 43,906              | 9,096      | 26–71    | 0,099 NS |

$p < 0,05$  : significatif \*.  $p > 0,05$  : non significatif NS. Test *t* de Student pour données indépendantes.

### III – DISCUSSION

Les caractéristiques morphologiques propres aux groupes ethniques, ont guidé plusieurs travaux antérieurs pour une meilleure précision de la diagnose anthropologique au-delà des attributs reconnus aux grands ensembles ethniques primaires, et partant, de la variabilité des populations humaines. Dans une perspective similaire, cette étude d'un intérêt certain pour l'anthropologie médico-légale, la chirurgie maxillo-faciale ainsi que les disciplines orthodontiques et orthopédiques, avait pour objectif de comparer les épaisseurs des tissus mous du profil cutané facial de deux groupes de filles ivoiriennes et libanaises résidant en Côte D'Ivoire. Dans tous ces domaines, la proximité de conformation de l'architecture des parties molles du visage avec celle du squelette facial, est un principe méthodologique important largement utilisé. Dans ce registre, certaines méthodes s'appuient sur la connaissance des épaisseurs moyennes de tissus mous, au niveau d'un certain nombre de points de repères anthropologiques largement décrits dans la littérature. A cet effet, dans cette étude portant sur des radiographies de profil issues des



dossiers médicaux de 66 patients (34 filles ivoiriennes et 32 filles libanaises) de 11 à 16 ans en classe I squelettique et normodivergents, les épaisseurs moyennes des tissus mous (12 mesures) ont pu être déterminées à partir de 24 points de repères céphalométriques (12 sur le profil cutané et 12 sur la structure osseuse) localisés.

Il convient par ailleurs de faire observer que le choix de la population féminine, pour cette étude, est guidé par le constat que ces dernières beaucoup plus portées à se préoccuper de leur apparence faciale, constituent la frange la plus importante de la patientèle des cabinets dentaires. Aussi, pays à fort taux d'immigration (24,2% d'étrangers selon les résultats du recensement général de la population et de l'habitat de 2014), la Côte D'Ivoire accueille la diaspora libanaise la plus importante d'Afrique depuis les indépendances. La mixité sociale qui caractérise la société ivoirienne, traduit la parfaite intégration des communautés tout en offrant des opportunités assez inédites par des études portant sur la variabilité humaine.

Concernant les résultats de cette étude, les comparaisons des épaisseurs des tissus mous du visage entre les deux groupes de sujets considérés ont mis en relief des différences significatives au niveau de la quasi-totalité des points considérés. De ce fait, les caractéristiques d'épaisseurs des tissus mous du visage s'avèrent très discriminantes entre filles mélano-ivoiriennes et leuco-libanaises. Les tissus mous aux points Glabell, Rhinion, Labial supérieur et inférieur, supramental, Pogonion, Gnathion et Menton sont plus épais chez les filles Ivoiriennes. Ainsi, le retentissement cutané de cette architecture dento-squelettique prognathe caractérisant les sujets mélano-ivoiriens, est manifeste à travers des lèvres plus protrusives, donc, plus épaisses; justifiant ainsi les fortes épaisseurs des tissus mous péri-buccaux de soutien (base de la lèvre inférieure et au niveau du menton) observées. Lesquelles caractéristiques d'épaisseurs des tissus mous labiaux et péri-labiaux traduisent des caractéristiques négroïdes telles que déjà mentionnées dans la littérature par Djaha et al. (1996) en Côte d'Ivoire, Isiekwe et al. (2012) au Nigéria. Aussi, le nez des sujets mélano-ivoiriennes, platyrrhinien, bas et plongeant présente, comparativement aux sujets leuco-libanais, un dos plus épais et une faiblesse générale des épaisseurs des tissus mous péri-nasaux de soutien, en conformité avec les observations de Isiekwe et al. (2012) sur des sujets négroïdes nigériens.

Par contre, les épaisseurs des tissus mous aux points nasal et Sous-nasal sont plus importants chez les libanaises traduisant une proéminence du nez qui tracte les tissus mous périphérique vers l'avant, justifiant aussi une forte épaisseur à sa base (sous-nasal). Le nez plus proéminent (donc plus épais) ainsi que son retentissement sur l'épaisseur des tissus mous sub-nasion chez les sujets libanais, apparaissent comme un élément d'anthropologie morphologique particulier aux populations caucasoïdes. Des travaux sur des adultes libanais (El-Hayeck et al. 2016), égyptiens (Bagwan et al. 2015) turcs (Celikoglu et al. 2015) et sur des adolescents Jordaniens (Hamdan 2010) confirment cette spécificité anthropologique.

### CONCLUSION

Cette étude a porté sur des radiographies numériques extraites des dossiers médicaux de 66 patientes adolescentes (34 filles ivoiriennes et 32 filles libanaises) de 11 à 16 ans, classe I squelettique et normodivergents en première consultation orthodontique. Les caractéristiques d'épaisseurs des tissus mous des filles mélanivoiriennes et leuco-libanaises observées dans cette étude reflètent la diagnose anthropologique de leurs groupes ethniques d'origine. Le caractère plathirien du nez, ainsi que les fortes épaisseurs des tissus mous du tiers facial inférieur singularisant traditionnellement les sujets négro-africains, sont observés chez les filles ivoiriennes. Aussi, chez les filles libanaises, la proéminence du nez, caractérisant généralement les sujets leucodermes, est observé. Cette étude, du fait de ce qu'elle a permis de révéler, présente un intérêt en anthropologie médico-légale, la chirurgie maxillo-faciale ainsi que les disciplines orthodontiques et orthopédiques et révèle l'importance de la céphalométrie radiologique.

### DÉCLARATION SUR LE CONFLIT D'INTÉRÊTS

Les auteurs déclarent qu'il n'y a pas de conflit d'intérêts en ce qui concerne la publication de cet article.

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# ORPHELINAT, FAMILLE ET DÉVELOPPEMENT PHYSIQUE DES ENFANTS D'ÂGE SCOLAIRE EN CÔTE D'IVOIRE

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La présente étude se propose de comparer le développement physique de l'enfant vivant à l'orphelinat à celui de son homologue qui bénéficie d'un cadre familial. Elle porte sur 184 enfants dont 92, vivant en milieu familial défavorisé et, 92 dans un orphelinat public d'âge scolaire (7–9 ans). L'observation du milieu de vie des enfants s'est réalisée à travers un questionnaire en face à face portant sur les caractéristiques sociodémographiques et économiques de ces derniers. Le développement physique a été apprécié en considérant les unités d'écarts-types relatives au poids pour âge et à la stature pour âge ou la note Z. La mesure de ces paramètres corporels s'est faite par l'utilisation respective d'un pèse-personne électronique et d'une toise staturale.

Les résultats montrent que les enfants vivant dans un orphelinat présentent des proportions d'insuffisance pondérale et de retard de croissance inférieures à celles de leurs pairs issus du milieu familial. De tels résultats mettent en évidence le caractère préjudiciable des conditions défavorisées, notamment le faible revenu, un logement précaire, le faible niveau d'étude, une alimentation de moins bonne qualité, l'insuffisance de soins sanitaires, concernant le développement physique de l'enfant.

**Mots-clés :** poids, stature, milieu de vie, enfants, Côte d'Ivoire.

## INTRODUCTION

L'enfant semble, d'un âge à l'autre se caractériser par des transformations tant physiques que morphologiques. L'ensemble de ce processus est désigné sous le vocable de développement physique. Selon Mayet (1912), celui-ci est un processus progressif et continu de croissance simultanée de toutes les dimensions de l'enfant. Quant à Mekhancha-Dahel (2017), le développement physique renvoie à la maturation organique et à la croissance somatique, c'est-à-dire à l'augmentation

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en taille et en poids. Cette croissance somatique dépend de l'interaction entre des facteurs génétiques, endocriniens et environnementaux (Onis et al., 2000). En clair, le développement physique serait le potentiel physique acquis par l'enfant sous l'action de son milieu de vie.

La relation entre les acquisitions et la maturation physique de l'enfant et son cadre d'existence apparaît plus étroite ainsi que Kouadio et Beugré (2015) indiquent que l'enfant naît dans un milieu. Le type de celui-ci qui se révélerait particulier pour l'enfant et le milieu offert par la famille. En effet, cette dernière comprend le père, la mère et l'enfant [5]. Elle est ainsi le premier cadre qui reçoit l'enfant en lui procurant des ressources socio-alimentaires nécessaires à son développement physique harmonieux.

Le père, par exemple, assure à l'enfant, un milieu empreint de protection physique et de sécurité alimentaire [6]. La présence du géniteur offrirait à l'enfant l'occasion de bénéficier régulièrement d'un toit, d'un endroit de repos, de tranquillité et de réalisation de ses séquences de sommeil. La mère, quant à elle, se propose d'assurer à l'enfant sa diète alimentaire séquentielle et journalière. Elle est également celle qui apporte les soins affectifs, médicaux dont a besoin l'enfant pour un bon développement (Unesco, 1981; Roques, 2003). La famille serait donc un milieu qui crée des conditions de vie qui influenceraient positivement le développement physique de l'enfant. L'absence des parents ne pourrait être sans conséquences sur le bien-être de l'enfant.

Il faudrait indiquer que plusieurs enfants sont séparés de leur père et mère, soit du fait de leur non reconnaissance par ceux-ci, soit à cause du décès des géniteurs. L'enfant, confronté à une telle situation, est, entre autres, accueilli dans une institution sociale publique, créée pour soutenir l'enfant sans parents, en l'occurrence l'orphelinat. Ce dernier est défini, dans l'optique de Vernaelde et al. (2017), comme une institution qui loge des enfants séparés de leurs parents, en raison d'un décès parental, d'abus d'enfants et de négligence chez soi ou de raisons socio-économiques.

Dans ce cadre, de nature institutionnelle, les enfants semblent être isolés de leur communauté habituelle familiale. Ils sont désormais aux soins de techniciens dont les relations avec ces enfants sont souvent empreintes d'ordres, de menaces, de restrictions [8]. Dans cette relation verticale et/ou conflictuelle, les enfants en orphelinat ne sauraient, par conséquent, s'offrir les soins et les ressources alimentaires nécessaires à leur épanouissement. La perte d'autonomie est d'autant plus probable que Vernaelde et al. (op. cit.), montrent que les décisions et les exigences de l'orphelinat sont prioritaires sur les besoins individuels des enfants. Dans cette atmosphère de privation de satisfaction des besoins physiologiques et relationnels, les enfants ne pourraient suffisamment former des attachements cruciaux pour un développement émotionnel sain, et par ricochet physique de qualité.

La relation entre le milieu de vie de l'enfant et son développement physique a intéressé plusieurs travaux. Ainsi, Aboussaleh et al. [9], a examiné l'effet du milieu familial sur le développement physique de l'enfant. Il a indiqué que le

milieu familial offrait à l'enfant des stimulations positives pour un développement physique de qualité. De même, El Hioui et al. (2009) ont étudié l'influence des conditions alimentaires et de soins offerts à l'enfant sur le développement physique de ce dernier. Ils concluent que l'enfant baignant dans un milieu caractérisé par de bonnes stimulations alimentaires réalise un meilleur développement physique.

Cette influence des facteurs environnementaux sur le développement de l'enfant est également observée dans l'étude réalisée par Zaouche-Gaudron (2006). L'auteur montre que les conditions de vie précaires ainsi que l'insécurité qui en résulte entravent le développement de l'enfant. A l'analyse, il semblerait que, dans ces recherches, l'accent n'ait suffisamment pas été mis sur l'orphelinat en tant que variable susceptible d'influencer le développement physique de l'enfant. L'objectif de la présente étude est de comparer le développement physique de l'enfant vivant dans un orphelinat à celui de son pair issu d'un milieu familial.

## 1. MÉTHODOLOGIE

### 1.1. Echantillon

La présente étude porte sur le développement physique des enfants vivant dans un milieu d'accueil (orphelinat), comparativement à celui de leurs pairs du milieu familial. En effet, le développement physique des enfants, notamment celui des enfants en situation difficile, constitue une préoccupation dans le monde. Cette question est d'autant plus pendante qu'en Afrique, l'on dénombre, selon l'Organisation Mondiale de la Santé (2016), près de 140 millions d'enfants confrontés à une maltraitance.

Dans les pays en voie de développement, comme ceux d'Afrique, l'on note une fréquence de retard de croissance corporelle supérieure à 10%. Il existe, ainsi, un écart, parfois très important, entre la proportion de déficit de développement corporel (plus élevée) chez les 20% des enfants de familles défavorisées et celle (plus basse) observée chez les 20% des enfants moins défavorisés de la population (World Bank Group, 2015).

C'est le cas de la Côte d'Ivoire où, selon l'Institut National de la Statistique (2012), on révèle que 30% des enfants de moins de 5 ans présentent un retard de croissance, 8% souffrent d'émaciation et 15% d'insuffisance pondérale. Ce phénomène s'observe dans la majorité des villes, en l'occurrence l'agglomération abidjanaise. L'on y dénombre près de 137 quartiers précaires qui s'étendent sur 2% de la superficie et abritant environ 20% de la population. Celle-ci, composée de différentes familles défavorisées, se caractérise par un niveau d'accessibilité alimentaire bas, des difficultés à s'offrir des soins de santé publics ou privés, un taux d'inactivité professionnelle ou scolaire important, de même qu'un soutien social irrégulier (Atta et al. 2013). La situation socio économique défavorable de ces familles ne semble pas créer un cadre nécessaire à l'épanouissement biophysique de leur progéniture. Le vécu quotidien des enfants, dont les parents sont absents, pourrait se révéler plus difficile.

Par exemple, ces jeunes individus ne bénéficient pas toujours d'une alimentation satisfaisante, suffisante et de qualité, ainsi que des services essentiels, notamment l'eau potable et les soins médicaux (Marguerat, 2003).

Plusieurs de ces derniers quittent, par conséquent, les familles pour se retrouver dans des milieux autres que familiaux, en l'occurrence la rue (Marguerat, op. cit.). L'on fait état de 26 000 enfants âgés de 6 à 12 ans de conditions défavorisées se réfugient dans les rues d'Abidjan (INS, 2014).

Ces derniers, âgés de 6 à 12 ans, comprenant des filles et des garçons, proviennent pour la plupart des quartiers défavorisés de ladite ville, notamment de la commune d'Abobo (Marguerat, op. cit.). Ils sont souvent, pour nombre important d'entre eux, accueillis dans des structures sociales étatiques, en l'occurrence l'orphelinat de Garçons de Bingerville et celui de Filles de Bassam. Ces deux établissements sont les plus anciens, les plus structurés et les mieux organisés, en termes de protection de l'enfant (Ministère de la Famille, de la Femme et de la Protection de l'Enfant, 2013). Ces enfants de conditions favorisées moins bonnes ne semblent pas se séparer tous de leur milieu parental.

Tenant compte de ces caractéristiques socio-démographiques comme critères d'inclusion et de non inclusion et considérant le stade de grande enfance (7–9 ans), 184 enfants de milieu de vie différent (famille, orphelinat) ont été retenus. Les enfants vivant avec leurs parents sont composés de 46 filles et 46 garçons. Leurs homologues issus de l'orphelinat se structurent respectivement en filles et en garçons (46 garçons et 46 filles). L'ensemble de ces deux groupes constitue l'échantillon sur lequel a porté l'étude.

## 1.2. Méthodes

La question examinée dans la présente étude s'inscrit dans une perspective transversale et analytique relative au développement physique des enfants vivant en orphelinat ou en famille. Pour ce faire, les orphelinats de Garçons de Bingerville, de Filles de Bassam et l'établissement primaire public Biégoussi d'Abobo ont été choisis. L'on a, d'abord, après avoir obtenu l'autorisation de l'institution et le consentement des sujets, administré à 172 enfants (87 enfants de l'orphelinat de garçons de Bingerville et 85 filles de l'orphelinat Bassam), un questionnaire en face à face comprenant 23 questions relatives à l'âge, le sexe, le niveau d'étude, le lieu de résidence, les ressources alimentaires, les antécédents médicaux des sujets. Ce questionnaire s'est intéressé également à la pratique d'activité sportive ou récréative et au rythme veille-sommeil.

Le dépouillement de ce questionnaire a permis de retenir 92 enfants dont 46 filles et 46 garçons âgés de 7 à 9 ans. Par la suite, le développement physique de ceux-ci a été mesuré. L'examen de cette variable s'est réalisé en considérant le poids, la stature. Les mensurations de ces paramètres physiques développementaux ont été explorées en utilisant des outils spécifiques. La mesure de la stature (la taille) s'est faite, en centimètre (cm), en recourant à la toise portable standardisée de



précision 0.1 cm. Le poids, quant à lui, a été mesuré en gramme (g), au moyen d'une balance électronique de précision 0.5 kg.

S'agissant de leurs homologues, qui en dépit de situations socio-économiques moins appropriées des familles, continuent d'y vivre, 252 sujets fréquentant l'établissement primaire public « Biégoussi » ont été sélectionnés en appliquant les critères d'inclusion et de non inclusion, les principes et les approches méthodologiques utilisées concernant les sujets orphelins. A l'issue de cette exploration, 92 sujets ont été considérés dont 46 garçons et 46 filles. L'ensemble des sujets a été soumis, après leur consentement, au même questionnaire administré aux des orphelinats, à des mensurations corporelles relatives à la stature et au poids en utilisant les mêmes outils anthropométriques précédemment exposés.

L'application de ces outils a permis d'observer, facilement et rapidement le développement physique des enfants de conditions de vie comparables. En plus, à travers l'usage du questionnaire et des outils anthropométriques, les données précises et chiffrées relatives à ces variables ont été obtenues.

Il faudrait indiquer, par ailleurs, que le questionnaire administré et la fiche d'enregistrement des données biométriques ont été anonymes, aucune mention n'a été faite sur l'identité des enfants. Le sujet observé a été représenté par un code. Les fiches relatives au questionnaire ont été conservées et manipulées que par les chercheurs eux-mêmes, afin de respecter le caractère confidentiel et objectif des informations collectées également pour éviter des erreurs éventuelles concernant les données collectées.

La distribution des données relatives aux dimensions corporelles des sujets étudiés poids et stature, a été examinée statistiquement en appliquant le test de Kolmogorov-Smirnov. Les résultats de ce contrôle montrent que les distributions des données relatives au poids et à la stature chez les deux groupes d'enfants suivent une loi normale (poids :  $p\text{-value} = 0,025 < 0,05$  et stature :  $p\text{-value} = 0,00 < 0,05$ ).

Les mesures obtenues ont été présentées sous forme de moyennes, concernant le poids et la stature, pris isolément, et d'unités d'écart-types ou notés Z, à partir des rapports du poids, de la stature à l'âge des enfants, conformément aux données de référence OMS/CDC/NCHS adoptées par World Health Organization (2006). Ces notes Z ont été obtenues en utilisant le logiciel Epi Info version 7. Il existe ainsi, selon Vidailhet (1999), un déficit statural et une insuffisance pondérale lorsque les rapports stature -pour-âge et poids pour âge sont au-dessous de -2Z ET. Les indices, variant entre -2Z et 2Z, définissent la stature et le poids considérés normaux. Ces états de croissance corporelle ont été exprimés en fréquences de poids et de stature corporels normaux, d'insuffisance pondérale ou de retard de croissance ou en fréquences de surpoids ou d'excès de stature corporels, pour créer, selon Gibson et al. (2006), des conditions de comparaisons standardisées pour tous les sujets.

L'ensemble des données obtenues a été traité statistiquement au moyen du logiciel statistique IBM SPSS version 23, en utilisant le test t de Student (moyennes) et du test exact de Fisher (fréquences) comme techniques statistiques appropriées

pour juger de la relation entre les variables examinées. La différence est jugée significative pour la valeur  $p \leq 0,05$ .

## 2. RÉSULTATS

La présente étude se propose d'examiner le développement physique des enfants en rapport avec leur milieu de vie de ces derniers. Pour ce faire, les paramètres biométriques, notamment le poids et la stature, des enfants âgés de 7 à 9 ans vivant dans un orphelinat ont été comparés à ceux de leurs pairs issus d'un milieu familial.

Les résultats montrent que les enfants issus de l'orphelinat présentent une stature et un poids supérieurs à ceux de leurs pairs du milieu familial ( $25,47 \text{ kg} \pm 4,19$  ;  $125,64 \pm 5,18 \text{ cm}$  contre  $22,52 \text{ kg} \pm 6,33$  ;  $123,84 \pm 3,47 \text{ cm}$ ) (le tableau I).

Tableau I

Comparaison du poids et de la stature moyens des enfants de 7 à 9 ans de l'orphelinat à ceux de leurs pairs du milieu familial

| Milieu de vie  | N  | Poids<br>$m \pm \sigma$     | Stature<br>$m \pm \sigma$ |
|----------------|----|-----------------------------|---------------------------|
| Famille        | 92 | $22,52 \text{ kg} \pm 6,33$ | $123,84 \pm 3,47$         |
| Orphelinat     | 92 | $25,47 \text{ kg} \pm 4,19$ | $125,64 \pm 5,18$         |
| Test t student |    | 0,080 S                     | 0,127 NS                  |

N : Effectif des sujets ; m : moyenne ;  $\sigma$  : Ecart type ; NS : non significatif ; S : Significatif.

La variabilité entre les deux groupes d'enfants (famille et orphelinat), du point de vue de la croissance staturo-pondérale, est confortée par l'examen des niveaux de développement physique de ces catégories d'enfants. Les résultats obtenus font état de ce que les enfants issus de l'orphelinat présentent une fréquence d'insuffisance pondérale et de retard de croissance significativement inférieures à celle de leurs pairs vivant en milieu familial (16,49% contre 32,61% et 32,97% contre 39,13%) (le tableau II).

Tableau II

Comparaison des fréquences (%) de poids et de stature normaux chez des enfants de 7 à 9 ans

| Milieu de vie         | N   | Poids pour âge |              |         | Stature pour âge |              |         |
|-----------------------|-----|----------------|--------------|---------|------------------|--------------|---------|
|                       |     | $Z < -2$       | $-2 = Z = 2$ | $Z > 2$ | $Z < -2$         | $-2 = Z = 2$ | $Z > 2$ |
| Famille               | 92  | 32,61          | 58,69        | 8,69    | 39,13            | 46,74        | 14,28   |
| Orphelinat            | 92  | 16,49          | 76,92        | 5,4     | 32,97            | 53,26        | 14,28   |
| Test Fisher (p-value) | 184 | 0,000 S        |              |         | 0,080 S          |              |         |

N : Effectif des sujets ; S : Significatif ; NS : Non Significatif.

De plus, l'on observe une différence entre les deux groupes d'enfants au plan de la croissance staturo-pondérale normale. En effet, les enfants issus de l'orphelinat

ont une fréquence de poids et stature normaux supérieure à celles de leurs homologues vivant en famille (76,92% contre 58,69% et 53,26% contre 46,74%) (le tableau II). La distance, observée entre les deux groupes d'enfants, est confirmée par le résultat de la vérification statistique ( $p$ -value < 0,000) (confère le tableau II). Cet écart entre les enfants, concernant le développement corporel, est loin de se réduire à l'effet des conditions de vie proposées par le milieu. Il pourrait également être influencé par les caractéristiques des enfants eux-mêmes, notamment le sexe. Chez les orphelins, les filles semblent présenter un poids et une stature supérieurs à ceux de leurs homologues garçons ( $26,73 \pm 3,49$  et  $127,73 \pm 5,42$  contre  $24,23 \pm 4,46$  et  $124,6 \pm 4,05$ ) (le tableau III).

Tableau III

Comparaison de la stature et du poids moyens des enfants de 7 à 9 ans du milieu familial selon le sexe

| Milieu de vie | Sexe   | N  | Poids<br>$m \pm \sigma$     | Stature<br>$m \pm \sigma$    |
|---------------|--------|----|-----------------------------|------------------------------|
| Famille       | Fille  | 46 | $23,34 \text{ kg} \pm 5,09$ | $123,47 \text{ cm} \pm 7,12$ |
|               | Garçon | 46 | $21,70 \text{ kg} \pm 5,59$ | $124,21 \text{ cm} \pm 9,34$ |
| t-student     |        |    | p-value = 0,144 NS          | p-value = 0,772 NS           |
| Orphelinat    | Fille  | 46 | $26,73 \text{ kg} \pm 3,49$ | $127,53 \text{ cm} \pm 5,42$ |
|               | Garçon | 46 | $24,23 \text{ kg} \pm 4,46$ | $123,6 \text{ cm} \pm 4,05$  |
| t-student     |        |    | p-value = 0,03 S            | p-value = 0,00S              |

N : Effectif des sujets ; S : Significatif ; NS : Non Significatif.

De même, les filles et les garçons vivant dans un milieu familial tendent à se différencier, lorsque l'on compare leur poids et leur stature moyens entre eux. Les filles bénéficiant de la présence des parents présentent un poids et une stature moyens supérieurs à ceux de leurs homologues garçons ( $23,34 \text{ kg}$  contre  $21,70 \text{ kg}$  et  $124,21 \text{ kg}$  contre  $123,47 \text{ kg}$ ) (le tableau III). Cette divergence est accentuée, lorsque les filles et les garçons sont comparés à leurs pairs d'âge identique. Les filles résidant dans un orphelinat se caractérisent par des poids et de stature normaux que leurs pairs garçons (88,89% contre 67,39% et 61,39% contre 41,30%, confère le tableau IV).

Tableau IV

Comparaison des fréquences (%) de poids et de stature chez des enfants de 7 à 9 ans selon le milieu et le sexe

| Milieu de vie | Sexe   | N  | Poids pour âge (%) |              |         | Stature pour âge (%) |              |         |
|---------------|--------|----|--------------------|--------------|---------|----------------------|--------------|---------|
|               |        |    | $Z < -2$           | $-2 = Z = 2$ | $Z > 2$ | $Z < -2$             | $-2 = Z = 2$ | $Z > 2$ |
| Famille       | Fille  | 46 | 21,73              | 60,34        | 27,66   | 26,09                | 50,00        | 8,69    |
|               | Garçon | 46 | 43,48              | 52,17        | 6,52    | 30,43                | 43,48        | 19,56   |
| khi2          |        |    | p-value = 0,000S   |              |         | p-value = 0,017S     |              |         |
| Orphelinat    | Fille  | 46 | 0,0                | 88,89        | 11,11   | 31,11                | 41,30        | 28,26   |
|               | Garçon | 46 | 32,61              | 67,39        | 0,0     | 32,62                | 67,39        | 0,0     |
| Fisher        |        |    | p-value = 0,000S   |              |         | p-value = 0,001 S    |              |         |

N : Effectif des sujets ; S : Significatif ; NS : Non Significatif.

Les jugements statistiques relatifs à cette différence entre les filles et les garçons n'apportent pas de réponse contraire ( $p$ -value = 0,03 (poids); 0,000 (stature) (le tableau IV). Ces résultats sont confirmés par les fréquences de poids et de stature normaux des filles et des garçons vivant en famille (65,21% et 50,00% contre 52,17% et 43,48%). Le résultat du contrôle statistique s'inscrit dans le même sens ( $p$ -value = 0,000) (le tableau IV). Des stimulations proposées aux enfants selon le milieu de vie ont été également interrogés. Ainsi, les enfants vivant en orphelinat présentent une fréquence de repas supérieure à celle de leurs homologues issus du milieu familial (100% contre 62,5%) (le tableau V).

Tableau V

Comparaison des fréquences (%) de repas chez des enfants de 7 à 9 ans selon le milieu et le sexe

|             | Sexe | N  | -de 3 repas | 3 repas | 3 repas + 1 goûter | 3 repas + 2 goûters |
|-------------|------|----|-------------|---------|--------------------|---------------------|
| Famille     | F    | 46 | 21,74%      | 32,61%  | 00%                | 00%                 |
|             | G    | 46 | 17,39%      | 28,26%  | 00%                | 00%                 |
| Orphelinat  | F    | 46 | 00%         | 00%     | 00%                | 100%                |
|             | G    | 46 | 00%         | 00%     | 00%                | 100%                |
| Test Fisher |      |    | 0,000S      |         |                    |                     |

G : Garçons ; F : Filles ; N : Effectif des sujets ; S : Significatif ; NS : Non Significatif.

L'examen de l'activité physique réalisée par les enfants fait état également d'une différence entre les enfants issus d'un orphelinat et leurs homologues vivant en compagnie des parents (87,5% contre 82,5%, le tableau VI).

Tableau VI

Comparaison de la fréquence (%) d'activité physique journalière chez des enfants de 7 à 9 ans selon le milieu et le sexe

| Milieu de vie        | Sexe | N  | 1 fois /semaine | 2 deux fois / semaines | 3 fois / semaines | + de 3 fois / semaines |
|----------------------|------|----|-----------------|------------------------|-------------------|------------------------|
| Famille              | F    | 46 | 00%             | 75%                    | 20%               | 5%                     |
|                      | G    | 46 | 00%             | 65%                    | 20%               | 15%                    |
| Orphelinat           | F    | 46 | 00%             | 75%                    | 25%               | 00%                    |
|                      | G    | 46 | 00%             | 50%                    | 20%               | 30%                    |
| Test exact de Fisher |      |    | 0,289NS         |                        |                   |                        |

G : Garçons, F : Filles ; N : Effectif des sujets ; S : Significatif ; NS : Non Significatif

L'on note un résultat analogue, en explorant la fréquence de soins médicaux dont bénéficient les deux groupes d'enfants. Les enfants vivant dans un orphelinat reçoivent plus d'attention sur le plan médical que leurs pairs vivant en famille (100% contre 12,5%, le tableau VII).

Tableau VII

Comparaison des fréquences (%) de soins médicaux chez des enfants de 7 à 9 ans selon le milieu et le sexe

| Milieu de vie     | Sexe | N  | Contrôle médical mensuel |      | En cas de maladie |     | Cas de maladie accentué |     |
|-------------------|------|----|--------------------------|------|-------------------|-----|-------------------------|-----|
|                   |      |    | OUI                      | NON  | OUI               | NON | OUI                     | NON |
| Famille           | F    | 46 | 00%                      | 100% | 15%               | 85% | 85%                     | 15% |
|                   | G    | 46 | 00%                      | 100% | 10%               | 90% | 80%                     | 15% |
| Orphelinat        | F    | 46 | 100%                     | 00%  | 100%              | 00% | 100%                    | 00% |
|                   | G    | 46 | 100%                     | 00%  | 100%              | 00% | 100%                    | 00% |
| Test exact Fisher |      |    | p-value = 0,000S         |      | p-value = 0,021S  |     | p-value = 0,131NS       |     |

G : Garçons, F : Filles ; N : Effectif des sujets ; S : Significatif ; NS : Non Significatif.

En clair, le milieu de vie, dans son fonctionnement et sa structuration, crée des différences au plan du développement physique, dans sa dimension staturo-pondérale de l'enfant. Quelles explications pourrait-on apporter à de tels résultats ?

### 3. DISCUSSION

L'étude s'est intéressée à la question du développement physique des enfants en lien avec le milieu de vie de ces derniers. Les observations faites, dans ce sens, auprès des deux groupes d'enfants. L'un en famille et l'autre issu d'un orphelinat, apportent quelques réponses à cette question. Les résultats obtenus révèlent que les enfants issus de l'orphelinat se caractérisent par une stature et un poids moyens supérieurs à ceux de leurs pairs vivant en milieu familial (le tableau I). L'examen du niveau de déficit staturo-pondéral conforte la différence entre ces deux groupes d'enfants. Ainsi, les enfants issus de l'orphelinat présentent une fréquence d'insuffisance pondérale et de retard de croissance significativement inférieurs à celle de leurs pairs vivant en milieu familial (le tableau II).

Considérant le sexe, les filles semblent être supérieures à leurs homologues garçons tant du point de vue du poids et de la stature moyens que du niveau de développement de ces paramètres corporels. Cette variabilité entre les filles et les garçons est observée aussi bien en milieu familial qu'en orphelinat (les tableaux III et IV). A l'analyse, les enfants vivant en orphelinat semblent réaliser un développement physique plus harmonieux que celui de leurs pairs vivant avec leurs parents.

Ces résultats peuvent être expliqués par plusieurs facteurs. L'un de ceux-ci porte sur l'état de santé prénatale et postnatale de la mère. Il faudrait indiquer que les enfants vivant en famille défavorisée naissent de mères enclines à une malnutrition gestationnelle. En effet, selon Sana et al. (2012), cet état biophysique inadéquat, caractéristique de ces mères défavorisées, est imputable en grande partie à la consommation d'aliments ayant une forte teneur en protéine animale pendant la grossesse. Un tel régime alimentaire aurait pour conséquence un mauvais équipement

interne. Le dysfonctionnement qui en résulte entraîne des mésadaptations biophysiques et éventuellement des enfants enclins à de petits poids.

En outre, le faible potentiel nutritionnel des mères peut provenir des grossesses trop rapprochées. Celles-ci réduisent les réserves nutritionnelles de la mère en micronutriments (Organisation Mondiale de la Santé (2003) Ainsi, le risque de retard de croissance est plus élevé chez les enfants dont les mères ont 5 enfants et plus. Cette corrélation est d'autant plus probable que les mères défavorisées, préoccupées et occupées à la recherche de la pitance quotidienne de la famille, seraient moins en mesure de consacrer suffisamment du temps et des ressources nécessaires pour de meilleurs soins à leur progéniture ou à une bonne récupération biophysique, en cas de déséquilibre biofonctionnel (Kouadio et al. 2018). Ainsi, un enfant, conçu dans un milieu biologique maternel inadéquat, ne saurait développer des capacités biologiques satisfaisant pouvant lui permettre de mieux se développer corporellement.

De plus, la presque totalité des enfants vivant avec leurs parents dorme dans un habitat de fortune, soumis à une alimentation insuffisante ou moins nutritive (40% environ de ces enfants n'ont pas les 3 repas journaliers) (le tableau V). Cette faible disponibilité alimentaire ou une alimentation pauvre en éléments nutritifs sont à l'origine d'anémie, de faibles ossifications, de déficiences bio-osseuse occasionnant une croissance staturale ou pondérale ralentie (El Hioui et al. 2008). Ainsi, un environnement nutritionnel inadéquat expose les enfants à des maladaptabilités biologiques dont les manifestations se caractérisent par des pathologies parasitaires et infectieuses importantes.

En effet, l'on note, dans le milieu familial défavorisé, une insalubrité au plan du logement (cour commune), des détritux avec des tas d'immondices entreposés à l'arrière et à l'avant des maisons, des latrines à ciel ouvert, le ruissellement des eaux usées à travers les habitations et une production de fumée à l'intérieur et à proximité des maisons. Ce cadre ne propose également pas de services de santé insuffisants, et les soutiens médicamenteux sont presque inexistants.

Il en résulterait, d'une part, un développement et une propagation d'agents perturbateurs endocriniens dans le cadre de vie, notamment des parasites, des bactéries (du fait de l'insalubrité), une pollution tant de l'air inspiré, des aliments consommés que de l'eau ingérée par l'enfant. D'autre part, les enfants sont laissés pour compte sans prestations et soins sanitaires (87,5% ne bénéficient pas de soins médicaux) (le tableau VII). Ils ne sauraient, par exemple, renforcer la défense de leur organisme (un faible taux de vaccination) ou s'équiper vis-à-vis de la malnutrition (20% des enfants issus des familles défavorisées ne peuvent s'offrir les 3 repas journaliers) (le tableau V).

Ces observations corroborent également celles faites par Tietche et al. (1998). Selon ce dernier, un environnement insalubre exerce un effet négatif sur l'adaptation biologique de l'individu. L'étude réalisée, par OMS (2018), aboutit à des conclusions similaires. Celles-ci indiquent que les conditions de vie précaires ainsi que l'insécurité

affective qui en découle entraveraient, sans contexte, le développement physique de l'enfant. De telles conditions, selon Zaouche-Gaudron (2005) et Han et al. (2018), ne procurent pas à l'enfant un fonctionnement physiologique et physique de qualité.

Des études, menées en Côte d'Ivoire, évaluant l'influence des caractéristiques du milieu de vie sur le développement physique de l'enfant, confortent les conclusions antérieures. Kouadio et Beugré (2015), par exemple, ont observé qu'en Côte d'Ivoire, les conditions de vie difficile, notamment une absence d'aide sociale appropriée, occasionne très souvent un dysfonctionnement sur le plan du développement physique de l'enfant. Ces observations sont étayées par des résultats issus de l'étude réalisée dans le même pays, trois ans plus tard (Kouadio et al. 2018). Selon ces auteurs, le développement physique de l'enfant (harmonieux ou disharmonieux) serait influencé par les conditions de vie qui lui sont proposées. Le fonctionnement physiologique de l'enfant réagirait aussi bien d'une certaine façon aux modifications des conditions que celui-ci se réalise de manière différente suivant l'individu. Dans cette optique, le facteur sanitaire apparaît fondamental dans le développement physique de l'enfant.

Au plan psycho-affectif, les conflits conjugaux et parentaux liés, entre autres, au stress quotidien qu'engendrent des conditions de vie difficiles entraînent des interactions disharmonieuses entre parents et enfants qui ne sont pas sans conséquence sur le développement des enfants. Ainsi, les mères de milieu familial défavorisé apparaissent, dans leur vécu quotidien, plus dépressives et donnent, ce faisant, moins de réponses adéquates aux besoins de leurs enfants. Les pères déstabilisés dans leur identité paternelle, en raison d'une identité professionnelle fragile, proposent des pratiques éducatives rigides et punitives, prennent l'enfant pour cible de leur désarroi (Zaouche-Gaudron, 2006).

De ce qui précède, l'on observe que le milieu familial, précarisé, donc vulnérable, peut entraîner des dysfonctionnements organiques préjudiciables à la croissance physique de l'enfant. Une situation inverse est mise en évidence chez des enfants bénéficiant de conditions nutritionnelles favorables, c'est-à-dire ceux du milieu institutionnel. Dans le cadre de la présente étude, il faudrait indiquer que la majorité des enfants vivant en orphelinat, sont issus d'un milieu familial défavorisé et ont séjourné durant un temps plus ou moins important dans les rues (moins de 2 ans pour certains et plus de 5 ans pour d'autres) (Marguerat, 2003). Dans cet environnement, ils étaient moins en mesure de satisfaire leurs besoins primaires notamment physiologiques. Par exemple, ils se nourrissaient de restes de nourriture qu'ils se procuraient dans des poubelles aux abords de restaurants, des domiciles ou des marchés. L'indisponibilité de ces débris alimentaires amène ces enfants à user de moyens inappropriés pour s'offrir les repas quotidiens notamment le vol, la violence, la mendicité (Marguerat, op. cit.).

Ces enfants ont donc intégré l'orphelinat dans des situations de malnutrition et présentant des sévices corporels. Cette situation aurait eu des conséquences sur

leur croissance physique. Mais, le milieu d'accueil, en l'occurrence l'orphelinat s'est révélé plus stimulant, en termes d'opportunités nutritionnelles et de soins médicaux satisfaisant. Par exemple, l'on note une fréquence de trois repas journaliers réguliers, des séances d'activités sportives et récréatives hebdomadaire de 2 heures, notamment les mercredis après midi et les samedis dans la matinée en plus d'une visite médicale mensuelle à l'infirmerie.

Le bon développement physique des enfants vivant à l'orphelinat, comparativement à celui des enfants vivant en famille trouverait sa source dans ces stimulations positives. En d'autres termes, les enfants du milieu institutionnel se développent mieux en raison des opportunités nutritionnelles, de la qualité de l'accueil et des soins médicaux réguliers dont ils bénéficient, quoiqu'il faille reconnaître que le cadre de vie par excellence de l'enfant, selon Aboussaleh et Ahami (2005), Roques (2003), est le milieu familial. Ces observations confirment l'effet des stimulations positives ou négatif sur le développement physique de l'enfant et confortent celles faites antérieurement. Ainsi, les enfants qui vivent dans des milieux offrant, un cadre hygiénique, une alimentation de qualité et des soins sanitaires sont enclins à présenter des fonctionnements biophysiques de qualité.

## CONCLUSION

La présente étude se propose d'examiner la relation entre le milieu de vie et le développement physique des enfants. L'examen de deux groupes d'enfants, l'un en milieu familial et l'autre en institution spécialisée (orphelinat), montre une situation relativement asymétrique des deux groupes d'enfants, quant au développement staturo-pondéral. L'on observe que les enfants issus de l'orphelinat présentent une stature et un poids moyens ( $125,64 \pm 5,18$  ;  $25,47 \text{ kg} \pm 4,19$ ) supérieurs à ceux de leurs pairs vivant en milieu familial ( $123,84 \pm 3,47$  ;  $22,52 \text{ kg} \pm 6,33$ ). Cet écart est conforté par l'examen des niveaux de développement physique de ces catégories d'enfants. Dans ce sens, les enfants issus de l'orphelinat présentent une fréquence d'insuffisance pondérale et de retard de croissance significativement inférieurs à celui de leurs pairs vivant en milieu familial (16,49% contre 32,61% et 32,97% contre 39,13%)

L'ensemble de ces résultats révèle, d'une part, le rôle positif de l'adaptation socio-psychologique des enfants de l'orphelinat en lien avec leur développement physique et, d'autre part, l'effet négatif de l'environnement familial défavorisé sur le développement des enfants. L'hypothèse de départ selon laquelle il existe un lien entre le milieu de vie et le développement physique, serait donc confirmée.

Toutefois, l'approche méthodologique (étude transversale) adoptée, la taille moins importante de l'échantillon ainsi que la difficulté à préciser la durée du séjour des sujets en institution spécialisée sont des facteurs qui amènent à une prudence dans la généralisation des résultats obtenus. Des études longitudinales ultérieures permettront de confronter ou non les présents résultats obtenus.



### Declaration sur le conflit d'intérêt

Il n'existe aucun conflit d'intérêt qui puisse concerner notre recherche et article.

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# THE EVOLUTION OF THE MEDITERRANEANISATION OF DIET IN ROMANIAN ADOLESCENTS

IUSEIN ERVIN<sup>1</sup>, CRISTIANA GLAVCE<sup>2</sup>, DANA POPESCU-SPINENI<sup>3</sup>

It is a well-established fact that nutrition is one of the most important factors affecting growth and development, with important consequences for adolescents. The contemporary life style in the industrial countries gave way to the establishment of the so-called western or American diet, a diet consisting mostly of industrially processed, fast-food, rich in sugar and saturated fats.

Opposed to the western diet there is the so-called Mediterranean diet, a diet presently accepted as a standard for a healthy life style, its health benefits being universally recognized today by medical professionals.

This paper's purpose is to study the evolution of mediterraneanisation of diet in Romanian adolescents both during the last period of time, as well as from the standpoint of differences existing in different regions of the country (socio-economic differences, education, opportunities etc.)

In order to establish the characteristics of the diet, the Kidmed test was applied as a questionnaire, on two adolescent cohorts from Bucharest and Iasi, in 2014 and 2017. The purpose of applying the same questionnaire on the same individuals in 2014 and 2017 was to enable a comparative analysis of the diet from the two different regions of Romania. At the same time, the data obtained in Bucharest in 2017 on 18 years old adolescents, was compared with similar data from 2011 in order to emphasize the changes taking place in the diet pattern of Romanian adolescents during the last decade.

**Keywords:** adolescents, mediterraneanisation of diet, Kidmed, healthy lifestyle, dietary pattern.

## INTRODUCTION

During adolescence, the individual goes through a series of biological and psychological changes where the quality and quantity of food consumed play a

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major role. The rapid changes taking place with the onset of puberty require an adequate caloric intake as well as supplements of minerals and vitamins, these needs decreasing towards the end of adolescence (Malina, Bouchard, 1991).

The contemporary life style in the industrial countries gave way to the establishment of the so-called western or American diet, a diet consisting mostly of industrially processed, fast-food, rich in sugar and saturated fats.

Opposed to the western diet there is the so-called Mediterranean diet, a diet presently accepted as a standard for a healthy life style, its health benefits being universally recognized today by medical professionals (Lacatusu *et al.*, 2019). Some of the characteristics specific to this type of diet are: a frequent consumption of fruits, vegetables, nuts, cereals and olive oil, a moderate consumption of fish and dairy products, as well as a reduced uptake of saturated fats and sweets.

Nowadays adolescents habits regarding diet are highly diverse and there is a need for nutrition education programmes to establish healthy eating habits at a young age that will have beneficial effects later in life (Mariscal-Arcas and *colab.*, 2009). The studies show a significant reduction in the prevalence of cardio-vascular diseases, neurological disease such as – Alzheimer (Scarmeas *et al.*, 2006), as well as in different forms of cancer (Sofi *et al.*, 2008). Additionally, it may contribute to reducing complications in various diseases such as the onset of a myocardial infarction or vascular diseases with a diabetic background (Trichopoulou *et al.*, 1997; Serra-Majem, 2001).

The Mediterranean diet had also been analyzed in various studies and appreciated for its lower environmental impact (Baroni *et al.*, 2007). Since it concerns a vast number of countries, the Mediterranean diet, recognized by UNESCO as an intangible cultural heritage of humanity, has also been selected by FAO as its first case study to develop a methodological approach for assessing the sustainability of diets in different agro-ecological zones (FAO/Bioversity, 2012).

The research in the field prove that adhering to the Mediterranean diet is associated with a high socio-economic status (Grosso *et al.*, 2013). Especially adolescents from high socio-economic status families show a higher tendency to adhere to this type of diet (Novak *et al.*, 2017).

Thus, this paper's purpose is to study the evolution of mediterraneanisation of diet in Romanian adolescents both during the last period of time, as well as from the standpoint of differences existing in different regions of the country.

## MATERIALS AND METHOD

According to the Eurostat report, the north-eastern part of Moldova region is the poorest in the country with a GDP of 29.5% per capita/UE average. At the same time, the richest and most developed areas are represented by Cluj-Napoca, Bucharest, Sibiu cities and Ilfov region.

Therefore, one of the aims in this study is to establish the degree to which Romanian adolescents from the two regions adhere to the Mediterranean diet, taking into consideration the socio-economic differences as well as the ones regarding place, education, opportunities etc.

The study included a number of 196 adolescents from Bucharest and Iași. The adolescents from Bucharest come from families with a high income and socio-economic status (over 5,000 Ron), as well as with highly educated parents, in their vast majority. These adolescents study in a private high school, their parents paying an annual school fee.

The great majority of adolescents from Iași county comes from the villages surrounding Iași city. They study in a public high school (without having to pay a school fee) and live in a boarding school. Their families have a low socio-economic profile, with a low income (between 1,000 and 3,000 Ron). At the same time, their parents are mostly high school or secondary school graduates.

In order to establish the characteristics of the diet, the Kidmed test was applied as a questionnaire, on two adolescent cohorts from Bucharest and Iași, in 2014 and 2017. The purpose of applying the same questionnaire on the same individuals in 2014 and 2017 was to enable a comparative analysis of the diet from the two different regions of Romania.

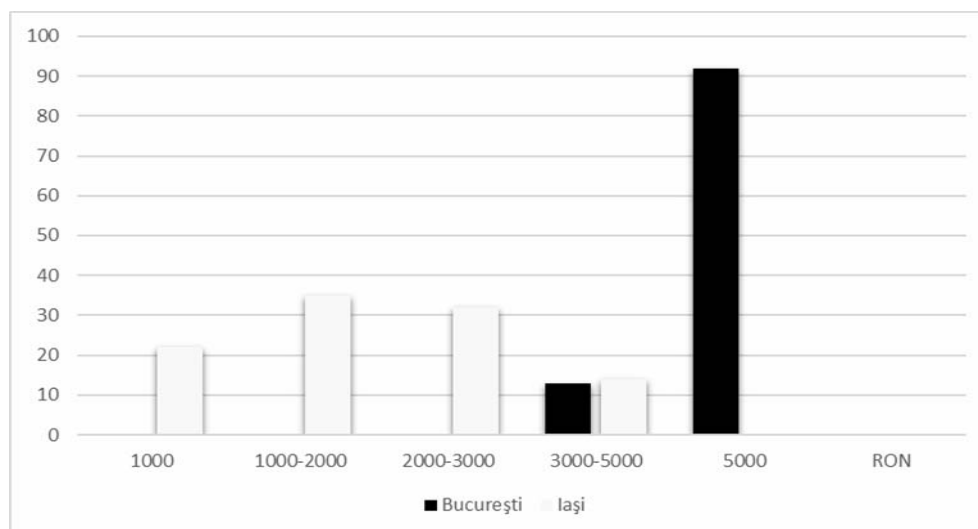


Fig. 1. The monthly income of adolescents' families (RON) in Bucharest and Iași.

Later we made a comparison of the data from 2017 from Bucharest with the ones from the study in 2011 by Popescu-Spineni on adolescents, in order to highlight any changes in the diet of adolescents that may have occurred during this period of time. Student's t test had been used in order to assess the differences

between the two cohorts. At the same time, logistical regression data analysis had been implemented in order to identify relations between adolescents' diet and existing socio-economic factors, for each city included in this study.

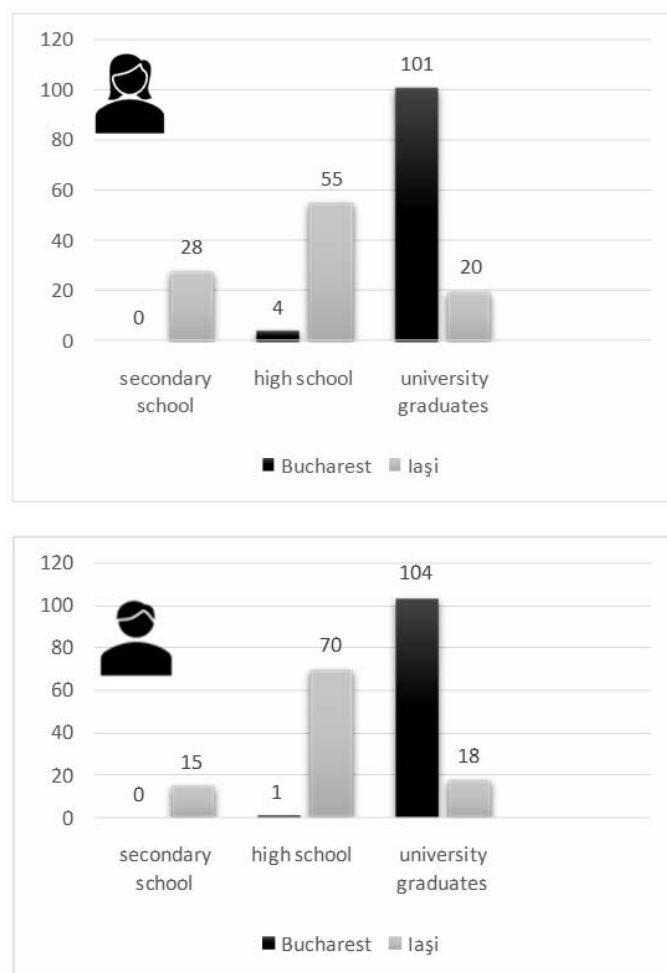


Fig. 2. The education level of adolescents' parents in Bucharest and Iași.

The Kidmed test, which according to a recent study is being used as a standard in order to establish the degree of adopting the Mediterranean diet (Idelson et al., 2017), consists of a number of 16 questions that aim to investigate the dietary habits of the individuals. In twelve of these questions one point is given for each positive answer, and one point is decreased for each positive answer in the remaining 4 questions (fast-food consumption, the lack of breakfast, consumption of baked goods or pastries, eating sweets a few times a day).

| <i>KIDMED test</i>                                           | <i>Scoring</i>               |
|--------------------------------------------------------------|------------------------------|
| Takes a fruit or fruit juice every day                       | +1                           |
| Has a second fruit every day                                 | +1                           |
| Has fresh or cooked vegetables regularly once a day          | +1                           |
| Has fresh or cooked vegetables more than once a day          | +1                           |
| Consumes fish regularly (at least 2–3/week)                  | +1                           |
| Goes >1/ week to a fast food restaurant (hamburger)          | -1                           |
| Likes pulses and eats them >1/week                           | +1                           |
| Consumes pasta or rice almost every day (5 or more per week) | +1                           |
| Has cereals or grains (bread, etc) for breakfast             | +1                           |
| Consumes nuts regularly (at least 2–3/week)                  | +1                           |
| Uses olive oil at home                                       | +1                           |
| Skips breakfast                                              | -1                           |
| Has a dairy product for breakfast (yoghurt, milk, etc)       | +1                           |
| Has commercially baked goods or pastries for breakfast       | -1                           |
| Takes two yoghurts and/or some cheese (40 g) daily           | +1                           |
| Takes sweets and candy several times every day               | -1                           |
| <i>KIDMED Index</i>                                          | <i>Adherence to Med Diet</i> |
| Score $\leq 3$ points                                        | Poor                         |
| Score 4-7 points                                             | Medium                       |
| Score $\geq 8$ points                                        | High                         |

Fig. 3. The Kidmed questionnaire and the respective scores.

Finally, a score less or equal to three indicates a poor level of adhesion to Mediterranean diet, a score between 4 and 7 indicates a medium level of adhesion with the need to improve, while a score higher or equal to 8 indicates a high level of adhesion to the Mediterranean diet.

## RESULTS AND DISCUSSIONS

As it can be seen from the graph in Figure 4, per total, there is no significant difference between the number of adolescents from Bucharest and Iași with a poor adhesion to the Mediterranean diet, a small increase in percentage being observed in Bucharest in 2017 (22%). Regarding the medium level of adhesion with a need of improvement, the average is higher for adolescents from Iași in comparison with the one from Bucharest (66.01% compared to 56.06% in 2014, 64.07% compared to 52.70% in 2017 respectively).

Regarding the high adhesion category, we can see a statistically significant difference between the two cohorts, in the second year of study (2017,  $t = 1.67$ ,  $p < 0.05$ ), while during the first year there is no significant difference (2014,  $t = 1.71$ ,

$p > 0.05$ ). At the same time, there are statistically significant differences between the two years of study in both cities (Bucharest  $t = 1.67$ ,  $p < 0.05$ ; Iași  $t = 1.77$ ,  $p < 0.05$ ).

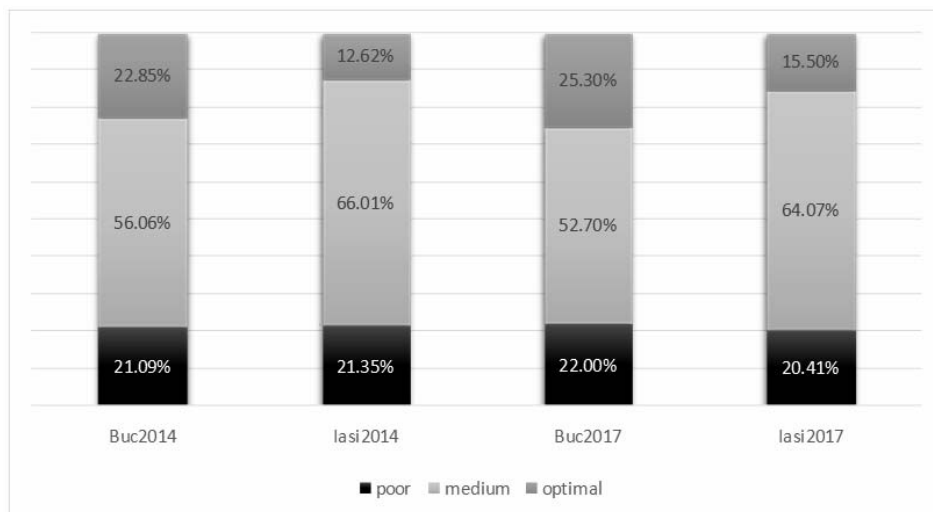


Fig. 4. The evolution of the degree of adhesion of adolescents in Bucharest and Iași to the Mediterranean diet between 2014 and 2017 (total).

Therefore, overall, there is a higher average of adolescents in Bucharest that adopt the Mediterranean diet – 22.85% in 2014, reaching a percentage of 25.30% in 2017. The percentage of adolescents in Iași in this category is smaller with respect to the one in Bucharest. Still we can notice an increase between the two years – 12.62% in 2014, 15.50% in 2017 respectively.

Regarding the difference between genders (Figures 5 and 6), both in girls and boys the high adhesion index (a score of minimum 8) is larger in adolescents from Bucharest compared to the ones from Iași, girls being more receptive to the Mediterranean kind of diet than boys, especially the ones from the cohort in Bucharest. Girls from Bucharest show a bigger difference in the percentage with high adhesion between the two years, in comparison to boys (9.1% in girls, 6% in boys, respectively).

An interesting aspect that can be observed from data presented in Figure 7 is the constancy of the percentage of adolescents that have breakfast regularly (71.9% in Bucharest in both years of study, 66.5% per average in Iași), a trend indicating a healthy habit among youth. There is no difference for this answer between the two years of study in Bucharest and a slight increase for Iași (1.89%).

Regarding the fast-food consumption a few times per week, the percentage of adolescents doing so, is higher in Iași compared to Bucharest, in 2014 (50.4% versus 37.1%). Later, at age 18, the situation is reversed – more adolescents in



Bucharest give a positive answer to this question (48.5% versus 33.9%). However, in both cities, the percentage remains under 50%, a decrease probably due to a rise in awariness among teenagers related to adopting a healthy lifestyle.

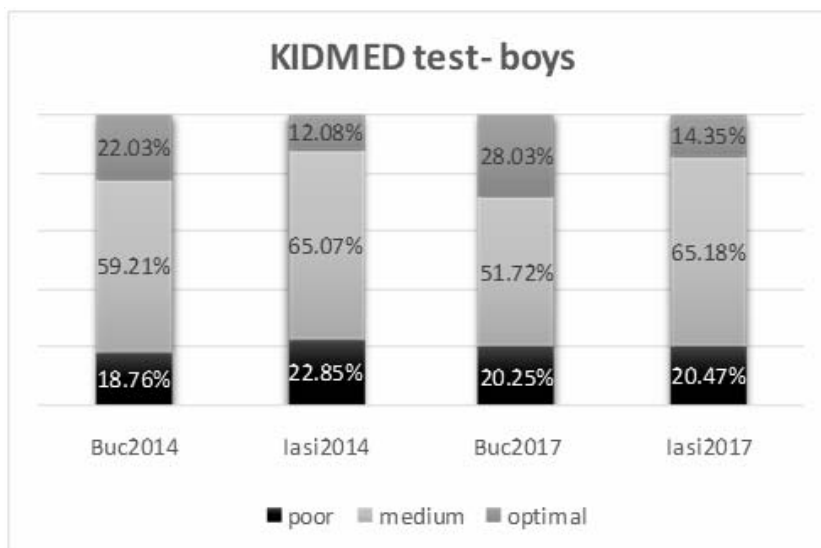


Fig. 5. The evolution of the degree to which male adolescents in Bucharest and Iași adhere to the Mediterranean diet between 2014 and 2017.

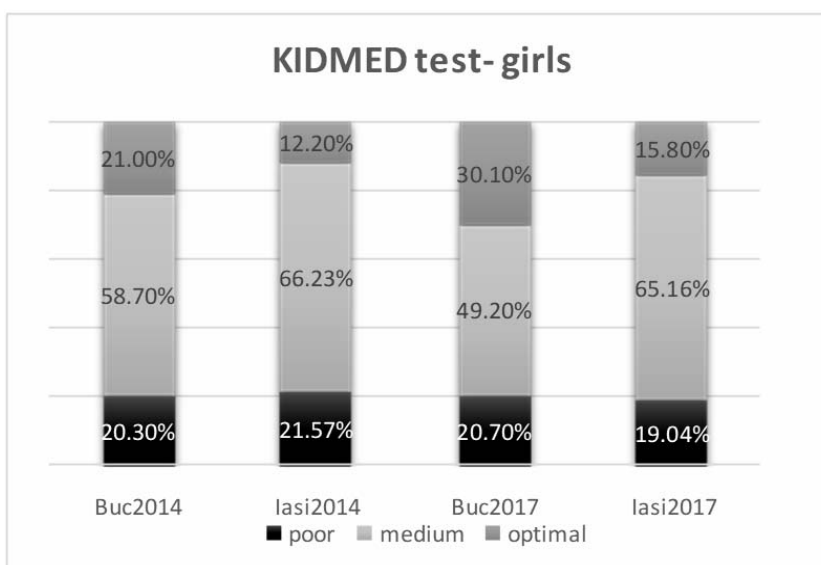


Fig. 6. The evolution of the degree to which female adolescents in Bucharest and Iași adhere to the Mediterranean diet between 2014 and 2017.

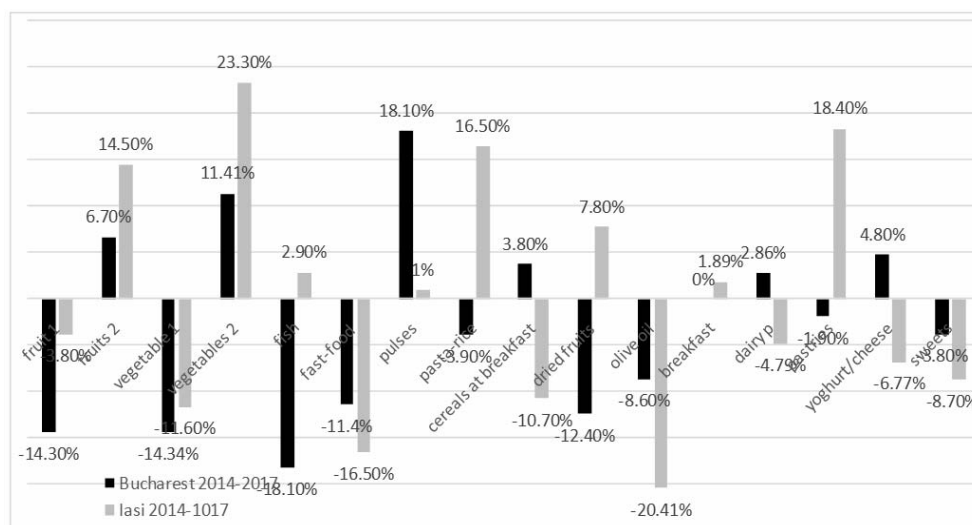


Fig. 7. The difference in responses (percentage) to the Kidmed test for Bucharest and Iași, between 2014 and 2017 (total).

From Figure 6 we can also notice an overall decrease in fast-food consumption between 2014 and 2017 for both cities, slightly higher for Iași. With respect to the habit of sweet consumption, the figures are higher in adolescents from Bucharest than in Iași, both in 2014 (56.1% versus 50.4%) and 2017 (52.3% versus 41.7%). Remarkably until 2017 we can observe a decrease in the sweet consumption in both areas, more significant in adolescents from Iași ( $t = 2.13$ ,  $p < 0.05$ ).

In order to analyze the evolution in time of the trend of mediterraneanisation of diet in Romanian adolescents we compared the answers to Kidmed test from 2017 to those from 2011 (Popescu-Spineni, 2011), both from Bucharest. In this way we were able to identify the changes taking place during this amount of time regarding the three categories about the degree of adhering to the Mediterranean diet in adolescents from Bucharest.

As it can be seen in the graph in Figure 8, overall, during the last years, the proportion of adolescents with a poor adhesion degree to the Mediterranean diet decreases to more than half of the value previously recorded. At the same time, there is a significant improve with respect to 2011, of the proportion of teenagers with an optimum level of adhesion to Mediterranean diet (with a score of minimum 8). However, together with these improvements, there is still a large percentage of adolescents (over 50%) with a medium level of adhesion and a need for a better diet.

With respect to the difference between genders, a significant improvement is observed both in girls ( $t = 2.14$ ,  $p < 0.05$ ) as well as in boys ( $t = 1.95$ ,  $p < 0.05$ ). In both genders, the percentage of teenagers with a score of maximum 3, (poor adhesion to the Mediterranean diet) decreases. At the same time the percentage of adolescents, regardless of gender, with a score of minimum 8 (optimum adhesion to the Mediterranean diet) increases. In both genders, but slightly less in girls, there

is still a high proportion of medium level adhesion to the Mediterranean diet, with the need for improvement.

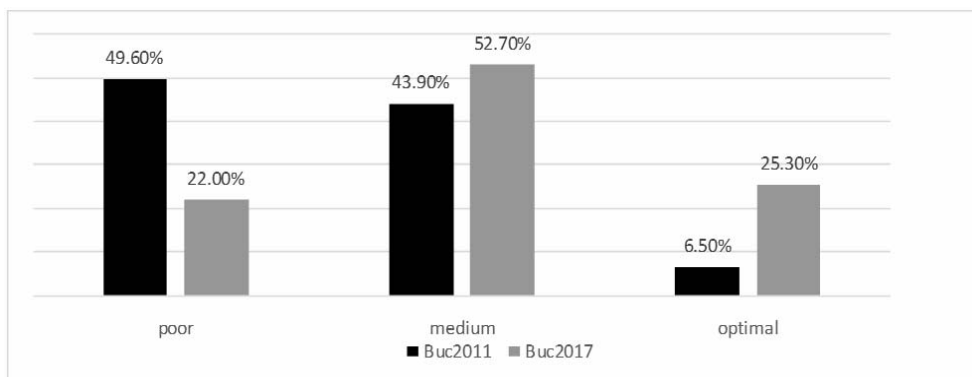


Fig. 8. The evolution of the degree of adhesion of adolescents in Bucharest to the Mediterranean diet between 2011 and 2017 (total).

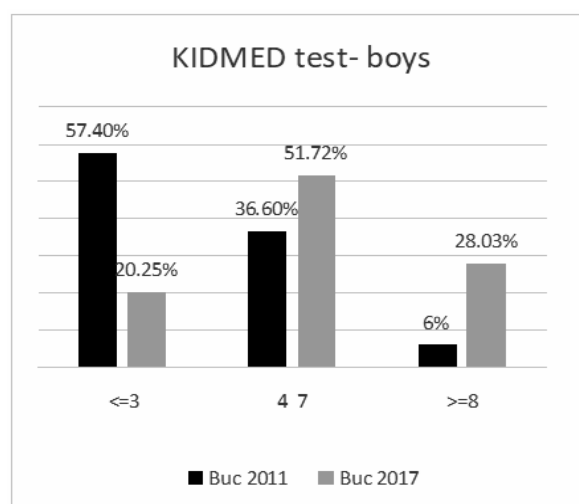


Fig. 9. The evolution of the degree of adhesion of boys and girls from Bucharest to the Mediterranean diet between 2011 and 2017.

At the same time, as seen in Figure 10, we can observe a significant percentage difference between years 2011 and 2017 for the large majority of individual responses of adolescents at 18 years of age, to the Kidmed test (fruits, fish, vegetables, pasta-rice etc.). Regarding the sweets consumption habits, there is a 4.65% decrease, a fact indicating a tendency towards an improvement of the quality of diet in adolescents, probably due to maturation and the rise in awareness about the negative effects eating large amounts of sugar can have on health. The greatest percentage difference seen between the two years of study is related to the habit of having breakfast. Thus,

here too, we can see an improvement, since there is an increasing percentage of adolescents that make a healthy habit from having breakfast.

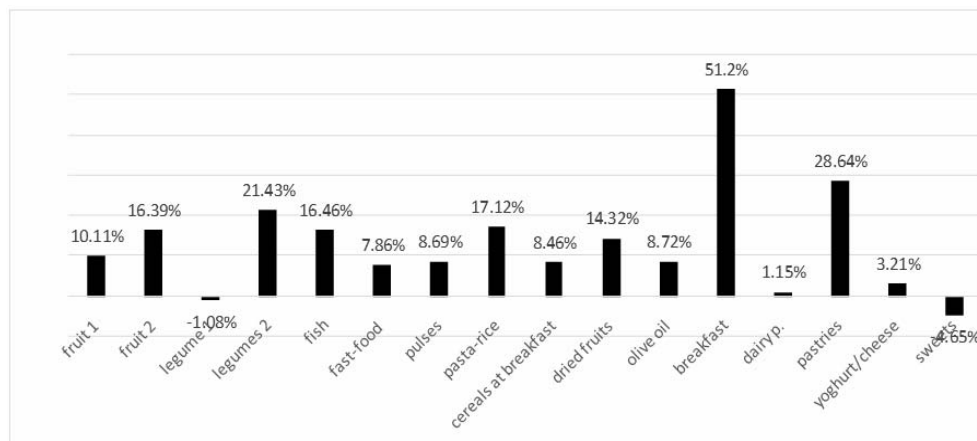


Fig. 10. The difference in response (%) to the Kidmed test between the years 2011 and 2017 (age 18).

The logistical regression analysis indicates a positive correlation regarding the adolescents from Bucharest, between the healthy diet, as observed from the data obtained from the Kidmed test, and different socio-economic factors like the education level of each parent, the level of income of the family, the number of members of the family etc. This relation of interdependence can be seen in both genders, both at 15–16 years of age (2014), as well as at 18 years of age (2017).

Therefore, for 2014, we observe a positive correlation between the quality of diet and the income level of the family in male adolescents from Bucharest ( $p$  value = 0.004, likelihood ratio = 0.0023). At the same time, the analysis reveals a relation between the diet quality and the number of members of the family in female adolescents from Bucharest ( $p$  = 0.01, likelihood ratio = 0.0033).

For 2017, the logistical regression analysis indicates again a positive correlation for the male adolescents from Bucharest with the mothers level of education ( $p$  = 0.0001, likelihood ratio = 0.057), and the family income level ( $p$  value = 0.001, likelihood ratio = 0.028).

The existence of such positive relations between the quality of diet and the different socio-economic indicators in adolescents from Bucharest, as opposed to those from Iași, may be explained by the fact that the first group is under the influence of better socio-economic conditions, as well as by being part of families that are composed, in their vast majority, of a small number of individuals (3 to 4 members on average).

One of the limitations of this current research is that, being a pilot study, there is a relatively small number of subjects involved in each cohort, an aspect that involved difficulties regarding the statistical analysis. The following study will

involve a greater number of individuals in order to reveal a stronger statistical association between available data.

However, the current research reveals an obvious tendency of association between a healthy diet and a high socio-economic status. This positive trend can be seen both in 2014, as well as in 2017, as opposed to the data from 2011, when such a correlation had not been observed.

### CONCLUSIONS

- There is a constant proportion of adolescents with a poor diet (21% on average) regardless the location or age; there is still a large percentage of adolescents with a medium degree of adhesion to the Mediterranean diet and need for improvement (over 50%); there is a larger percentage of adolescents with optimal diet in Bucharest (25%)
- There is a larger degree of variability among girls (a higher positive trend in Bucharest); girls are more open towards bringing change to their diet with respect to boys
- Between 2011 and 2017 there is a significant drop in the percentage of adolescents with poor diet (22%) as well as an increase in the percentage of those with optimal diet (25%) in Bucharest
- The data indicate a trend of change in the adolescents diet towards mediterraneanisation, between 2011 and 2017
- The existing differences between the adolescents in Bucharest and Iași show that in Romania there is still a significant cleavage regarding the socio-economic level, an important aspect that influences the decisions and the life style of adolescents
- The research indicates that the larger change in the diet had taken place mostly in the population of adolescents with favorable socio-economic conditions, proving once more the positive impact of these factors with respect to developing regions; thus there is a need to apply better policies to teenagers in poorer regions for the improvement of health
- There is still a large percentage of adolescents from both cities with a score between 4 and 7, a fact indicating the need to adopt effective strategies that aim to inform and rise awareness of teenagers regarding the healthy nutrition habits

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# LINKING LIVELIHOOD AND CONSERVATION: STUDYING THE CORRELATION BETWEEN LIVELIHOOD OPTION & ANTHROPOGENIC PRESSURE IN BUFFER OF TADOBA-ANDHARI TIGER RESERVE, INDIA

ROHAN BHAGAT<sup>1</sup>

Anthropogenic pressure affects the health and growth of forests. The National Forest Commission of India report 2006 indicated that around 41% of total forest in the country is already degraded, 70% of the forests have no natural regeneration, and 55% per cent of the forests are prone to fire. The villages on the fringe of a Tadoba-Andhari Tiger Reserve have traditionally used the non-use zone of forest to full fill their demand of food and livelihood. The goal of current study was to quantify anthropogenic pressures acting on Tadoba-Andhari Tiger Reserve with respect to their source of income. Hence we conducted a socioeconomic questionnaire survey of 4 villages in the western periphery of the Tadoba-Andhari Tiger Reserve Chandrapur, India. The objective of this paper was to illustrate the degree and manner by which poor rural communities rely on forest for income and subsistence. Regression and correlation analysis between source of income and total income of all villages shows significant relation and that between livestock and total income shows non-significant relation. There is an urgent need for awareness of depletion of forest resources among the villagers for which combined efforts of governmental and non-governmental organization is necessary.

**Keywords:** anthropogenic pressure, livelihood, natural regeneration, socioeconomic.

## INTRODUCTION

India has a huge population living close to the forest with their livelihoods critically linked to the forest ecosystem. Forests have provided a livelihood for rural populations in India over the ages and many plant species are used by local communities for their domestic needs. These anthropogenic pressures have a drastic effect on the forest ecosystems in India (Anitha 2003) (Rai 2001) (Singh 1992). The role of forestry in rural livelihood is indicated by a few studies like

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(Vedeld 2007), who observed that forest products contribute between 20–40% of the total income of household in forest areas. Forests in India are treated primarily as social and environmental resource and only secondarily as commercial resources. Understanding the processes of forest degradation is very important for the conservation and management of biodiversity. Therefore the current study is undertaken to assess the impact of source of income on forest vegetation in the western boundary of the Tadoba-Andhari Tiger Reserve.

## MATERIALS AND METHODS

### Study area

The study area was carried out in the 4 villages from the western periphery of Tadoba-Andhari Tiger Reserve which included Sitarampeth 1 N20° 12'31.5" E079° 19'17.5" (village in the buffer zone), Sitarampeth2 N20° 12'11.4" E079° 18'48.8" (completely encroached village), Bhamdeli N20° 11'32.2" E079° 19'28.9" (already relocated village) and Ghosari N20° 16'43.1" E049° 16'57.6" (village on the periphery of TATR).

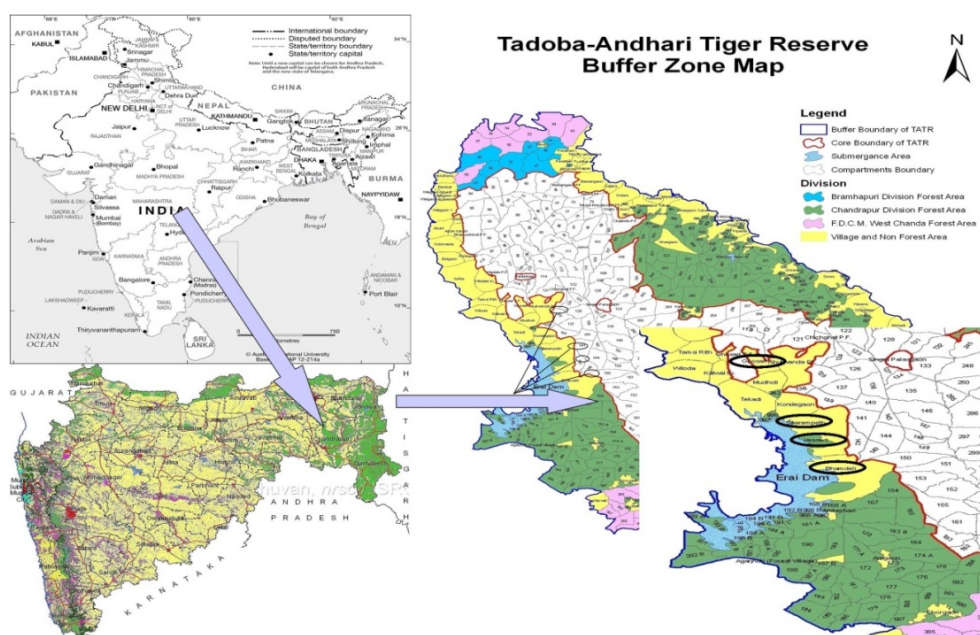


Fig. 1. Study area map.

### Socioeconomic survey

Survey was conducted during in the month of May and June 2015. The data were collected in quantitative and qualitative aspects which consist of the



interdependence source of livelihood of the villagers and their annual income. The information of 25% of the total population of the 4 villages in the western periphery was analyzed.

### Statistical analysis

The regression and correlation were carried out between the source of income and annual income to check the dependence pattern. All the analysis was carried out by using Microsoft Excel and SPSS 17.

Table 1

Observation and calculations. Socioeconomic observations

| Correlation         |         |        |        |       |        |       |        |      |      |
|---------------------|---------|--------|--------|-------|--------|-------|--------|------|------|
| Pearson correlation | TNH     | NHS    | TPI    | AFS   | NM     | NF    | FSR    | LHPF | AIPF |
| TNH                 | 1       |        |        |       |        |       |        |      |      |
| NHS                 | 1.000** | 1      |        |       |        |       |        |      |      |
| TPI                 | .994**  | .994** | 1      |       |        |       |        |      |      |
| AFS                 | .635    | .635   | .714   | 1     |        |       |        |      |      |
| NM                  | .987*   | .987*  | .999** | .751  | 1      |       |        |      |      |
| NF                  | .999**  | .999** | .998** | .669  | .993** | 1     |        |      |      |
| FSR                 | -.354   | -.354  | -.452  | -.943 | -.499  | -.395 | 1      |      |      |
| LHPF                | .930    | .930   | .955*  | .794  | .964*  | .943  | -.600  | 1    |      |
| AIPF                | .303    | .303   | .402   | .928  | .450   | .344  | -.989* | .523 | 1    |

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

TNH: Total number of households.

NHS: Number of households sampled.

TPI: Total population.

AFS: Average family size (persons per household).

NM: Number of males.

NF: Number of females.

FSR: Sex ratio (females per thousand males).

LHPF: Landholding per family (ha).

AIPF: Annual income per family (Indian Rupees).

Table 2

Livestock

| Correlation         |      |       |         |      |      |
|---------------------|------|-------|---------|------|------|
| Pearson correlation | TLP  | AAPH  | LOF     | FEF  | AIPF |
| TLP                 | 1    |       |         |      |      |
| AAPH                | .480 | 1     |         |      |      |
| LOF                 | .932 | .623  | 1       |      |      |
| FEF                 | .932 | .623  | 1.000** | 1    |      |
| AIPF                | .373 | .987* | .498    | .498 | 1    |

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

TLP: Total livestock population.

AAPH: Average number of animals/households.

LOF: Livestock-owning families.

FEF: Fodder extracted from the forest.

AIPF: Annual income per family (Indian Rupees).

Table 3

Energy consumption

| Correlations        |        |       |      |
|---------------------|--------|-------|------|
| Pearson correlation | TWEF   | FWEF  | AIPF |
| TWEF                | 1      |       |      |
| FWEF                | .957*  | 1     |      |
| AIPF                | -.987* | -.900 | 1    |

\*. Correlation is significant at the 0.05 level (2-tailed).

TWEF: timberwood extracted from forest.

FWEF: Firewood extracted from forest.

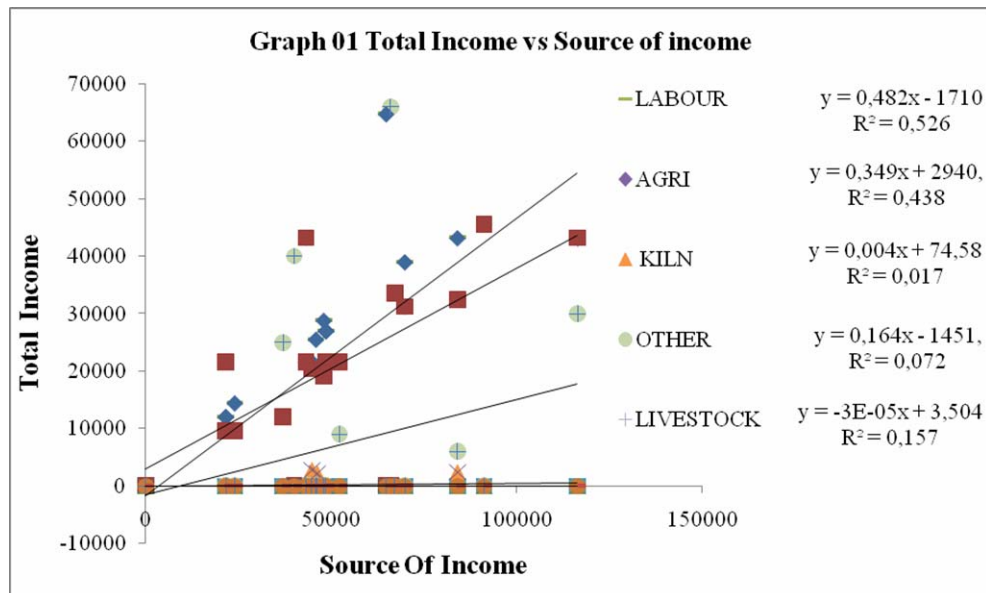
AIPF: Annual income per family (Indian Rupees).

Table 4

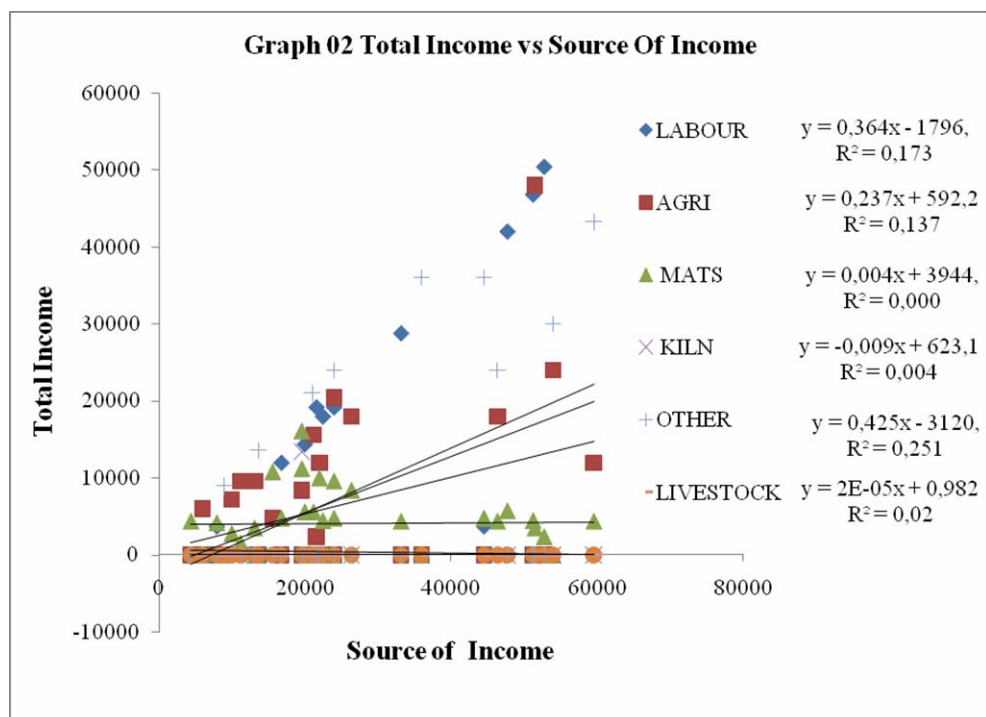
Regression and Correlation coefficient analysis between source of income and annual income

|                        | Regression equation   | R <sup>2</sup> value |                     | Regression equation   | R <sup>2</sup> value |
|------------------------|-----------------------|----------------------|---------------------|-----------------------|----------------------|
| <b>Labour</b>          |                       |                      | <b>Tendu</b>        |                       |                      |
| Sitarampeth 1          | $y = 1.090x + 24775$  | 0.526                | Sitarampeth 1       |                       |                      |
| Sitarampeth 2          | $y = 0.476x + 22080$  | 0.173                | Sitarampeth 2       |                       |                      |
| Bhamdeli               | $y = 0.883x + 67416$  | 0.095                | Bhamdeli            | $y = -0.885x + 10086$ | 0                    |
| Ghosari                | $y = 1.758x + 32538$  | 0.195                | Ghosari             | $y = 0.381x + 60233$  | 0                    |
| <b>Agriculture</b>     |                       |                      | <b>Self-farming</b> |                       |                      |
| Sitarampeth 1          | $y = 1.256x + 23424$  | 0.438                | Sitarampeth 1       |                       |                      |
| Sitarampeth 2          | $y = 0.580x + 21238$  | 0.137                | Sitarampeth 2       |                       |                      |
| Bhamdeli               | $y = 1.235x + 61921$  | 0.158                | Bhamdeli            |                       |                      |
| Ghosari                | $y = 1.161x + 28785$  | 0.234                | Ghosari             | $y = 5.783x + 54237$  | 0.665                |
| <b>Kiln</b>            |                       |                      | <b>Others</b>       |                       |                      |
| Sitarampeth 1          | $y = 4.331x + 47145$  | 0.017                | Sitarampeth 1       | $y = 0.440x + 45462$  | 0.072                |
| Sitarampeth 2          | $y = -0.464x + 25855$ | 0.004                | Sitarampeth 2       | $y = 0.592x + 21059$  | 0.251                |
| Bhamdeli               | $y = 1.107x + 97061$  | 0.111                | Bhamdeli            | $y = 0.730x + 80240$  | 0.484                |
| Ghosari                | $y = 0.513x + 57566$  | 0.015                | Ghosari             | $y = 1.153x + 48653$  | 0.751                |
| <b>Bamboo products</b> |                       |                      | <b>Livestock</b>    |                       |                      |
| Sitarampeth 1          | $y = 0.083x + 30321$  | 0                    | Sitarampeth 1       | $y = 7E-06x + 1.56$   | 0.006                |
| Sitarampeth 2          | $y = 0.074x + 25373$  | 0                    | Sitarampeth 2       | $y = 2E-05x + 0.982$  | 0.02                 |
| Bhamdeli               | $y = -0.671x + 10090$ | 0                    | Bhamdeli            | $y = 1E-05x + 1.611$  | 0.055                |
| Ghosari                | $y = -0.57x + 61453$  | 0                    | Ghosari             | $y = 2E-06x + 2.487$  | 0.002                |

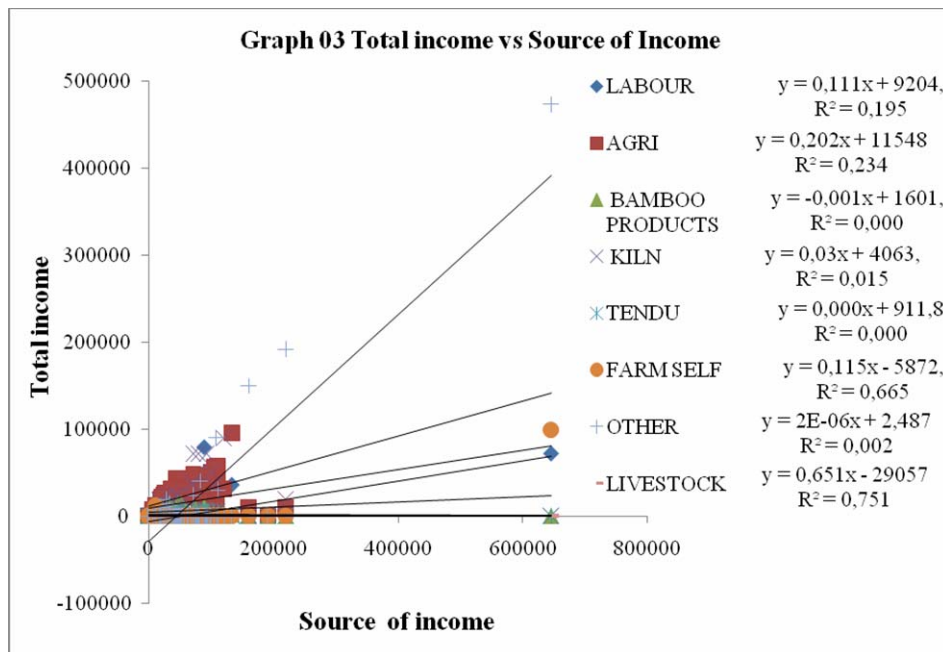
Sitarampeth 1



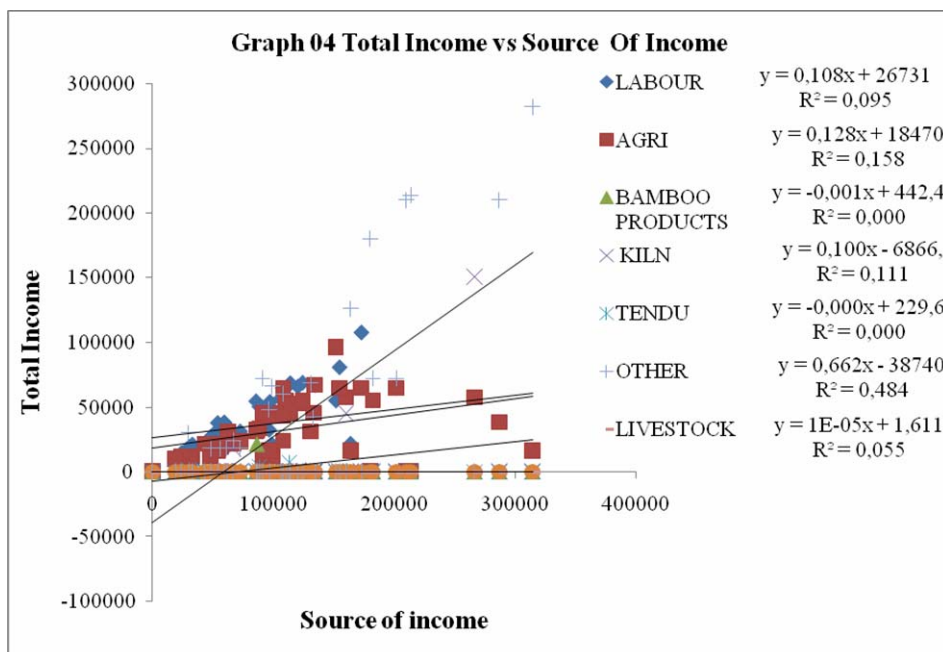
Sitarampeth 2



## Ghosari



## Bhamdeli



## RESULTS

- A strong positive relationship (0.955) between total population and land holdings (at 0.05) (Table 1).
- Average landholding was found to be 1.071 hectares per family.
- A significantly positive (0.987) relationship was recorded between the average number of animals per household and the annual income per family (at 0.05) (Table 2).
- A very strong positive significance (1.000) relationship was also found between livestock owning families and fodder extracted from the forest, which proves that 100% of the families extract fodder from the forest (at 0.01) (Table 2).
- A significantly negative relationship (−0.987) was recorded between firewood, extracted from the forest and annual income whereas significantly positive relationship (0.957) was recorded between timberwood, extracted from the forest and annual income (at 0.05) (Table 3).
- Agriculture, Bamboo products, Kiln, Tendu and Livestock don't show a significant relation with the total income ( $r^2 < 0.5$ ) (Table 4).
- In Sitarampeth 1, labour shows positive correlation with the total income (0.526) (Table 4).
- In Ghosari, self-farming (0.751) and other occupations (0.665), e.g. Forest workers, safari guides, etc. show a positive correlation with the total income (Table 4).

## DISCUSSION

Lack of employment opportunities and low income are the major causes for rural people's dependency on forests for their livelihood (Chandra Mohan Sharma, 2009). This dependency is causing degradation of forests and is forcing people to migrate to cities in search of jobs. As per the 2011 census, 49 percent of the households in the country use firewood for cooking (FSI, 2011). A significant negative correlation was found between firewood collection, timber wood collection and total income which show that the people are not dependent on forests for fuel wood and timber wood as a source of energy and their livelihood as most of the households have Liquefied Petroleum Gas (LPG). A significant positive correlation was found between labour, self-farming, other occupations and total income which prove that the villagers are not dependent on other forest products as their source of income. Among all the families, 58% families of the villages possess livestock and their total income is dependent on livestock and all these families extract fodder from the forest which means that the villagers are dependent on the forest for fodder. This increases the chances of human-animal conflict in turn increasing the anthropogenic pressure on the forest.

### CONCLUSION

The current study suggests that households are strongly dependent on the forest for their livelihood. If development interests of local people are marginalized for a long period of time, they might adopt actions detrimental to the goal of conservation. Though it will be unrealistic to expect tiger reserve authority to solve all socio-economic problems to the satisfaction of local people, people's participation in management planning and monitoring could reduce the prevailing conservation people conflicts. Such information will hopefully assist policymakers in their efforts to conserve scarce and precious natural resources, and improve the livelihood of these poor rural communities.

### RECOMMENDATIONS

If the anthropogenic pressure is to be reduced, an alternative source of livelihood should be provided to the villagers living on the periphery of the Tadoba-Andhari Tiger Reserve.

### ACKNOWLEDGEMENTS

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## PRACTICES AND ARTEFACTS OF POPULAR CULTURE IN COMMUNIST ROMANIA: AN ANALYSIS OF LIFE HISTORIES

SIMONA RODAT\*

The present paper deals with the popular culture in Romania during the communist period in 1947–1989. Using the research method of life histories of people living at that time, subjective data about the lived culture were gathered as they remembered and described. In the paper the practices and rituals of popular culture as well as the products and artefacts are analysed and discussed. The research focused both on elements of folk culture and lifestyle in the communist era, and also on what influenced them, such as the historical intervals, macrosocial processes, foreign trends, impositions of the authoritarian communist regime etc. Thus, in the paper there are discussed the results of the research that pointed out that the Romanian popular culture in the communist epoch was influenced both by the distinct stages the communist regime has been going through in this period, and by some large-scale phenomena that led to transformations in society, such as industrialisation and urbanisation. Moreover, while the practices, products and artefacts of popular culture imposed by the communist regime did not become really ‘popular’, some Western influences could be ascertained especially after 1959, when a ‘relaxation period’ in the communist regime began. These Western influences upon the Romanian popular culture did occur especially through media, particularly music and cinema, and these determined also in Romania, even during a regime that strictly controlled people’s lives, certain trends in cultural practices and lifestyle, which could not be avoided even by an authoritarian and totalitarian regime.

**Keywords:** communist Romania, popular culture, lived culture, folk culture, life histories.

### INTRODUCTION

The communist period is a noticeable one in the history of Romania. The political regime, having a distinct specificity characterized by the ruling of the single party, brought with it important changes in the society, at economic and social level, especially by the imposed macro-social processes such as collectivization and nationalization, or largely forced, such as industrialization and urbanization.

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These radical transformations in society also involved cultural shifts, marked by prohibitions, changes and impositions. In these circumstances, the popular culture in Romania during the communist era had its own distinction of this time, which involved the control and severe restrictions at a the cultural level, including mass media, along with the cultural imposition of socialist ideology and cultural tendencies that constituted the pillars of support of communist propaganda. At the same time, a certain cultural continuity of the interwar period has maintained, as even a totalitarian regime could not totally destroy a certain cultural evolution in its unfolding course.

In the present paper the popular culture in Romania during the communist period is analysed, more precisely the lived culture as remembered and described by the people living at that time. This subjective perspective on the lived popular culture was obtained through the method of social biographies, in the form of life histories, which has the advantage to offer a global perspective upon some socio-historical phenomena, because through it the interactions between individual-group-society are rendered as temporal processes *à la longue*, unfolded during some decades. Using this method 'subjective' data were gathered about the 'lived culture', and also about the existence, evolution, appropriation, negotiation, resistance or rejection of the popular culture products, artefacts and practices in the Romanian communist epoch.

### CONCEPTUAL AND THEORETICAL FRAMEWORK

Specific to cultural studies is the tendency to increasingly consider more areas of human activity as 'culture'. This tendency is part of a wider current that tends towards radical reflexivity in practically all areas of human activity, being a characteristic of the modern era (Lawson 1985; Giddens 1991). In cultural studies, the word 'culture' refers to the sociologically and anthropologically motivated preoccupations for the practices and products created by human beings. They are considered as expressing and including, at the same time, a certain degree of subjectivity. The sense of culture is seen as a social construct, and cultural studies tend to analyse how it is structured, articulated and put into circulation in various environments (Dahlgren and Sparks 2000).

This paper starts from the theoretical perspective opened by the culturalist approach, more exactly from the theoretical elements introduced by the so-called 'break' from the end of '50s in cultural studies. That break was marked by the appearance of the studies of writers such as R. Hoggart (1957), R. Williams (1958), S. Hall and P. Whannel (1964), E.P. Thompson (1968) who created a challenge to the liberal/ idealist tradition in which values and ideas were considered essentially autonomous and free-floating, separate from the economic and political life of society. But these writers also challenged the earlier, reductionist Marxist theories



that saw culture as ultimately determined by the economic base of society. The new theorists tried to explain culture as having a complex interrelationship with other aspects of political, social and economic life (Casey et al. 2002: 57). In this perspective, culture is actively produced – it is not simply a passive receiver, influenced by economic structures, but it can be, in its turn, influential.

On the other hand, there is no doubt that the word ‘popular’ is one of those terms able to create some of the most controversial debates in cultural analysis. This notion has been used in discussions with at least three meanings and a significant part of the problem lies precisely in the difficulty interlocutors have to face when deciding which meaning to use at a certain moment (Sparks 2000: 24). In this study I am not going to put the emphasis on the ideological or the political meaning of this term – neither on its sense used to distinguish the mass of the people (not ‘people in general’) from the titled, wealthy or educated people, nor on the meaning given to it in the left political tradition. I am going to take into consideration the meaning submitted by the British cultural studies, that emerged in the ’60s and followed a neo-Marxist tradition that criticizes and contrasts elite notions of culture, including ‘high culture’, with popular, everyday forms practiced by minorities. The superiority of all forms of elite culture including high culture is challenged and compared with useful, valuable forms of popular culture and hermeneutic attention is shifted from the study of elite cultural artefacts to the study of minority group ‘lived culture’ (Baran and Davis 2000: 224).

In this respect, I take into consideration the meaning of the concept ‘popular culture’ not as ‘what remains’ outside ‘the culture of the elite’ or *high culture*, but as something created *by* and *for* people, including cultural products, practices and artefacts, indigenous forms of culture as legitimate expressions of people. From this point of view, popular culture encloses *folk culture*. In British cultural studies, the continuity between popular culture and folk culture is emphasized. Despite the fact that an important part of that what we call folk culture disappeared along with the process of the organic communities’ dissipation, some types of folk culture remained, and they undertook different forms (Hall and Whannel 1964: 52).

Moreover, mass culture cannot be understood as completely excluded from popular culture, given that the term of ‘popular culture’, as J. Fiske already in 1989 defined, refers to a process: the interpretative assimilation of capitalist mass culture products by the people, which, in his opinion, in a revised version of the Marxist class analysis, means *most of the people*. In this view, people select of the multitude of possible ways of interpreting the cultural products the ones which address directly to the sense of popular, and which can be used in order to offer a popular meaning to social experience (Fiske 1989: 24).

Considering this conceptual framework, the term ‘popular culture’ is understood in this paper in its wider sense, as including both folk and mass cultural artefacts and practices, ‘lived culture’, which gives people a sense for their social experiences.

### THE SOCIO-POLITICAL-HISTORICAL CONTEXT – STAGES OF COMMUNISM/ SOCIALISM IN ROMANIA

The communist/ socialist regime in Romania was not a standardized one, on the contrary, it compassed a series of distinct stages, which differed one from another in a radical way. After the 1945–1947 interval, when the communist forces took over the power by violence and fraud – and with the massive help offered by the Moscow regime – there followed a period characterized by one of the most ruthless and dramatic regimes in the Romanian history: the implementation of the Stalinist model, in economy (by the processes of nationalization and collectivization), politics (setting up the power monopoly of the unique party and approaching ‘the dictatorship of the proletariat’) and culture (constructing a Romanian *homo sovieticus*).

The period 1959–1974 was named also the ‘enlightened absolutism’ and can be characterized as a ‘relaxation’ stage of the Romanian socialism. This period started from the last years of Gh. Gheorghiu Dej leadership and continued in the first years of Nicolae Ceaușescu, and was marked by measures of political, economic and cultural relaxation, by moving away from Soviet Union and reorienting towards national values.

Finally, the period 1974–1989 meant the return to a tough dictatorial regime, but a different and totally new one: a presidential regime, centred on Ceaușescu’s personality cult. The totalitarian regime of Ceaușescu introduced in Romania a new form of socialism: the dynastic socialism (Georgescu 1995: 287), characterized by: pushing the personality cult until paroxysm; imposing the dictator’s family members in front of the country; reinforcing the Stalinist methods of people control (the infamous *Securitate* – ‘Security’ developed new methods for terrorizing people); economic disaster (strict centralization, planned economy, damaging industrialization); frequently interrupted domestic electricity in the name of being ‘economic’; no central heating in apartments; the impossibility of travelling outside the country; lacks in most of the consumer goods; and even by the starvation of the population in the last years of the dictatorship.

### RESEARCH QUESTIONS AND METHODOLOGY

The study presented in this paper focused on the popular culture in the communist/ socialist Romanian society between 1945–1989. One challenge of the empirical research was to see how applicable the concepts of popular culture developed in Western countries were for understanding the communist popular culture.

The general objective of the research was to outline the main aspects of the popular culture in Romania during the communist period and to identify the popular culture practices and artefacts and their roots. In this respect, my research questions focused on the following issues: a) if there was in this period a historical

continuity of the pre-World War II monarchic period regarding popular culture artefacts and practices; b) because the communist/ socialist regime in Romania was not a uniform one, but it included some distinct phases which, in some respects, radically differed from each other, I was also interested if the popular culture evolution in Romania was influenced and shaped by the characteristics of each of these phases, c) to what extent the popular culture practices and products imposed by the communist regime became real 'popular', and how people possibly appropriated them or resisted to them; d) if the Romanian popular culture followed the general trend of the popular culture practices and artefacts developed in the industrialised societies and how those were imported, appropriated, or possibly sanctioned/ prohibited by the rule forces.

The method used was the *social biography*, in the form of *life histories*. More exactly, I used the technique of 'multiple autobiographies', understanding the term in its classic sense, as subjects' narrations about themselves, about their own lives. By using this method I tried to see: how the personal life trajectory interwove with the social micro-environment, but also with the dimensions of the macro-environment (like socio-political changes); how the cultural practices and artefacts were lived or made and what significations people gave to them; how some socio-political phenomena – such as forced collectivization, industrialization, urbanization, and so on – were understood 'by the interior'. Besides, the biographical method has the advantage to offer a global perspective upon some socio-historical phenomena, because through it the interactions between individual-group-society are rendered as temporal processes *à la longue*, unfolded during some decades. By the findings obtained through this method I expected to collect 'subjective' data about the 'lived culture', and also about the existence, evolution, appropriation, negotiation, resistance or rejection of the popular culture products, which in the end could lead us to outline the situation of popular culture in Romania in the communist epoch.

There were analysed the autobiographies of 62 persons who have lived a part or a large part of their life in the communist era. Because some of these persons were very old (over 80 and even over 90 years old), the life histories provided inside looks on all the distinct communist/ socialist phases in Romania, including the 'Stalinist' one. In terms of gender, 31 subjects of the research were male and 31 female, while from the point of view of the residential environment they were born, 39 subjects were born in the rural area and 23 in the urban one.

The autobiographies were made following a structure given by a biographic guide, whose main issues were: a) date of birth and place of birth, childhood; b) school period; c) their own family and work; d) mass media consume (media understood in a large sense); e) elements of popular culture (including folk culture) – both artefacts/ commodities and 'lived culture' (cultural practices, lifestyle). The research was focused both on those cultural products and practices imposed by the authorities, and on those generated by people (including the ones considered ways of resisting, such as the jokes against the regime); both on the local cultural

products and the foreign ones, taken in different ways and adapted, and so forth. Due to confidentiality related reasons and the private character of revealing the identity of the research subjects, in this article they are referred – in the quotes that follow – as S1, S2,... S62. They were ordinal connoted like this, from the oldest (S1) to the youngest (S62).

## RESULTS OF THE RESEARCH AND DISCUSSIONS

### Practices of popular culture in communist Romania

One of the popular culture practices that resisted from the time of the monarchy, before the Second World War and continued during the communist period was the tradition of popular parties where people – especially the young ones – used to get together, listen to music and dance. They were known by different names, but the main denominations for them were ‘balls’ (usually held indoors in different locations) and ‘round dances’ (usually held in open spaces, in the middle of the village – in Romanian ‘hore’). These parties have had a very long tradition in the Romanian society, lasting for centuries in the rural area. Their main characteristics were: live played popular music (by bands called ‘tarafe’ – traditional folk music bands), traditional popular dances, and people wearing their best clothes (traditional popular costumes, and later special ‘good’ clothes). These parties managed to survive the urbanization, especially the ‘balls’, which were held in cities too, almost in the same way. Our research shows the fact that these parties are being recalled by the subjects across all the communist era, no matter what stage was developing. They had assumed the role of providing *entertainment* (especially during the Stalinist period they were among the few ways of entertaining people), but also *social roles*: on the one hand, getting to know potential life partners for the young people, and on the other hand, gathering groups of people under the same roof, strengthening the community spirit and the group communication, which were under the constant attack of the communist ideology, but still maintained by people.

S36: “When I was young I used to go to the round dances organized every Sunday in the clearing of the village, where not only young people used to join, but also older ones”.

S26: “I had many friends and I used to go with them to the balls which were being organized by the U.T.M. (the youth organization of the Romanian Communist Party between 1954–1965 – n.a.) every Saturday. We used to put on long floating dresses and curled our hair, that was the fashion back then”.

In villages, the balls usually took place in the ‘culture homes’ (in Romanian ‘cămine culturale’). These are buildings constructed since the monarchic era: their

construction began in 1922, due to the initiative of the Royal Cultural Foundation 'Prince Carol'. In a brief period of time, they turned into the main instruments for 'promoting culture' in rural areas. These were the places where all social events took place (wedding and baptism parties, school celebrations, popular contests between communes, small traditional popular music 'concerts' or 'shows', etc.). In every 'culture home' there was a 'festivity room' (endowed with a stage and chairs for the viewers), this room being the same place where balls took place, after having removed the chairs and placed them on the sides. The urban correspondent of these 'culture homes' were the 'Houses of Culture', offering more space and serving for various purposes. In this case, the 'show room' and the 'ballroom' were separated, they did not function in the same location. At the same time, in urban areas, balls used to be organized in other locations too, not only in the houses of culture, such as the stadiums of plants, in the open air, or in the cafeterias of factories.

S28: "We were gathering at the culture home in our village, where we could watch shows comprising of dances, singing, chorus. There was also a folk band playing traditional Romanian music, led by a very talented and dedicated teacher. Those bands were holding shows not only in our commune, but also in the near villages, where there were contests named *distance dialogue*".

S11: "The «Republica» Plant owned a football stadium next to the plant and on Saturdays, after receiving the wages, they used to organize gatherings where we drank beer, juice and ate grilled highly seasoned minced meat rolls (in Romanian 'mici', traditional Romanian food – n.a.); the music was played by very good bands, live, and we could listen and dance to various genres of music, but especially traditional popular one'.

S15: "I met my husband at one of the dances that were taking place at that time on Sunday evening at Depot. It was a big hall where all the parties and dances were made".

Being aware of the popularity of these parties and of the potential danger lying in these gatherings, the communist authorities paid attention to such events. Despite the fact that there were no clear interdictions preventing people from organizing these popular parties, they were being surveyed, at least to some degree, by the people who used to inform the authorities. That is why many popular parties, on a smaller scale and without being public, were also organized in the private space. Our research subjects used different terms to name such parties, such as 'dances' and 'soirées' (especially those referring to the first stage of the communist era), or 'bairams' and 'feasts' (referring to the next stages).

Noteworthy is the fact that also the specificity of these popular parties changed with the time: although popular music was heard, and popular dances continued to be danced, especially in the '60s–'70s, they began to become the

places where Western music at the time was also played, such as rock and roll, then rock and disco. At the same time, the related dances (twist, disco) and other types of dances (waltz, tango, blues, cha-cha-cha etc.) started to become popular, differing radically from the prior 'national folk dances'. Such get-togethers continued to take place throughout the communist period, although various restrictions and dangers were noticeable. For example, if the music or noise was too loud, then it was very possible that the Miliția (the police forces of the time – n. a.) appeared at the door.

S18: "The music we were listening to when going to «dances» was waltz, tango and Romanian round dances".

S34: "I remember the so-called «soirées» a couple of lads used to organize, where they invited the girls they liked and where we were dancing on music played back by the gramophone".

S32: "During the holidays we used to get together, several boys and girls, and to organize «dances» in one of our apartments, where we were listening and dancing to «pop music», recorded on magnetic-tapes: blues, twists, Charleston, tango and so forth".

S49: "We were listening to rock music, disco and dancing to their beats".

Beside the parties organized for the public on non-working days, the popular culture in Romania kept also during the communist period the parties held whenever some special event took place in people's life (for instance weddings and baptisms). But if the communist authorities did not introduce prohibitions regarding the get-togethers with music and dance on days off, the situation was different regarding the ceremonies in churches. The communist society claimed to be an 'atheist society', so participation in church ceremonies was difficult or even forbidden (e.g. the members of the Communist Party were not allowed to enter a church, and if they did it and were caught, they were punished). That is why many 'religious weddings' and 'baptisms' have been made in secret.

S8 (talking about the Stalinist period, the first communist stage in Romania): "After 1948 I was constantly followed by an agent of the *Securitate*. Many of my peers and people I used to know were arrested or they just vanished, and we did not know anything about them. (...) The weddings and baptisms were made in secret, because going to the church was forbidden".

The situation was similar regarding church ceremonies related to religious holidays. Officially, Christmas and Easter 'did not exist' in the Romanian socialist society. But in practice they were being celebrated, both at the church and (especially) at home. The popular cultural practices related to religious celebrations and holidays are other elements of *folk culture* that resisted during the whole

communist period. Furthermore, in addition to the religious ceremonies and the practices connected to them, Romanian people kept practicing the related popular customs and rituals: Christmas carolling, Easter egg painting, etc.

S25: "Christmas was celebrated in the family. We, the kids, went carol singing where we usually got pretzels, biscuits and fruits, and in the evening, we gathered in the centre of the village. All of us were celebrating New Year in the village at the cultural home. (...) On Easter we used to go to the church. In the Easter evening we used to dress up with new clothes and gather in front of the cultural home, where people were dancing round dances and were partying until midnight".

S29: "In winter, around the holidays, people used to put on funny costumes and masks and went carol singing, sometimes squabbles arose among them. And on the first Easter morning one had to put a red egg into a tea kettle filled with water and then wash one's face with it, in order to have rosy cheeks all year long".

It should be emphasized the fact that some of these popular culture elements were adapted so as not to attract the attention of the communist authorities, for instance by slightly altering the lyrics of carols (e.g. the name of Jesus Christ was removed from some texts, to prevent the possible prohibition of the respective text). Moreover, the name of Santa Claus (in Romanian: Moș Crăciun, which literally translated would mean "Christmas Old Man") and the date when he was supposed to come and give gifts to kids were changed, in order to conceal any connection of Santa Claus with Christmas and the birth of Christ. Thus, back then Santa Claus used to be called 'Father Frost' (in Romanian: Moș Gerilă) and he did not come on the 24<sup>th</sup> of December, but on the 30<sup>th</sup> or 31<sup>st</sup> of December, on New Year's Eve. Also, the traditional Christmas tree had begun to be called since 1949 by the term 'winter tree' (Pocotila 2011), and this name lasted until 1989, when the communist regime collapsed.

S34: "We were not allowed to celebrate Christmas (this was a celebration behind closed doors, discreetly, in the family) so Father Frost (this was the name used for Santa) came on New Year's Eve".

Continuity also existed in the celebration of other types of feast days: those related to mythological beliefs, probably having pre-Christian roots, as well as those related to agricultural works and seasons. For example, many research subjects recalled popular customs and practices related to the holiday of 'Sânziene', a popular celebration of Midsummer's Day, taking place on the 24<sup>th</sup> of June, which seems to be connected to the cult of love and fertility. In popular tradition, on this day, the unmarried girls could find out (dream), if they followed certain rituals, the 'chosen', and/or the year in which they will get married. Yet, the customs and practices associated with this holiday differed in various regions of Romania, as the quotations

below show. If in some places the ‘Sânziene’ (Midsummer’s Day) was simply celebrated through get-togethers, songs and dances, in other places people celebrated it by visiting the tombs and igniting spectacular fires.

S16: “The Midsummer’s Day was an opportunity for young people to meet and maybe to find the one with who you would want to unite your destiny. This was a celebration of love, which was honoured as it should be honoured, with songs, dance, and joy”.

S54: “The most spectacular custom, which impressed me from the first years of my life, was happening on the night of ‘Sânziene’, when everyone went to the cemetery, to the tombs, to light candles, then the young boys took worn tires, climbed with them at the top of the hill, they set fire to them and pushed them to roll down the valley”.

Another popular rejoicing often invoked by the research subjects, both the oldest and the youngest ones, is related to the harvest celebration: it took place in the fall (the exact date varied depending on the area in Romania or even on each village in particular) and involved a series of rituals and customs.

S29: “The most beautiful day of the year was Harvest Day. All the houses were decorated with the fruits of the earth (grapes hung on the windows, corn sticks were fixed on the gates, fruits were arranged in large earthen bowls), the people dressed in the most beautiful clothes, the carriages were polished and adorned, the manes of the horses were braided with red tufts. People drank must, they ate sheep’s jerky, and square danced so that dust rose in the air. The folk music band (‘taraf’ in Romanian – n. a.) was heard till the neighbouring village”.

Related to harvesting period, people used to practice many lived popular culture events, not only by organizing celebrations and ceremonies, but also in connection to the daily work and life of people. Certain agricultural activities, such as removing the husks and silks from the corn cob, were transformed into occasions for social gatherings and popular rituals. The members of the community used to help each other. They were also turning these reunions into sessions where various elements of popular culture were shared (songs, riddles, popular stories, jokes and so forth).

S 7: “There were great piles of corn in the yard, and in the evening, the neighbours came, sat down, and unfurled the corns. A lantern was made from a pumpkin, that is, the pumpkin was hollowed out and a candle was put inside. In a large pot there was boiled corn that was still soft. For us, the children, it was paradise, especially since we were allowed to stay up late”.

S57: “In autumn the people in the village used to organize some sort of social gatherings: we went to the host’s house, where we used to help her with



various domestic chores, such as removing the husks from corn cobs. Meanwhile the host offered us cookies and wine. People were very happy to help, because while working they could hear jokes, riddles, stories or sing traditional popular songs”.

As seen from these recollections, many popular practices managed to stay the same (rituals on Midsummer’s Day or during harvesting period) or they got re-invented or adapted during the communist period, as was the case with some rituals related to religious beliefs and holidays (e.g. modifying the text of carols, giving Santa another name or ‘postponing’ the Christmas Eve until New Year’s Eve), and their evolution did not depend on the stages of communism, but rather on the historical and cultural progression of the society.

Regarding the practices imposed by the communist authorities, despite the fact that they were massively promoted, they did not gain too much success or popularity, just like it happened with the slogans. The meetings between ‘comrades’ never became popular, even though the people working for the *Security* tried to use them to control and indoctrinate people. Group activities ‘for the benefit of the society’ were, in fact, forced labour with no remuneration, in fields that did not have enough work force, such as agriculture. And the celebrations organized under various pretexts were also perceived as activities carried out by the means of constrain and menaces, hence involving many efforts and wasted work.

S31: “The «community activities» until 1989 were horrible, any of them: going to the corn harvest, going to the parade, or «greeting on the route», all voluntary work. They all involved constraint, fatigue, unnecessary waste of time”.

S50: “Important anniversaries took place on stadiums, and the *pioneers* used to rehearse all summer long for one event. Only those people who «knew someone» managed to get away with this activity”.

S40: “The community activities were organized by the party (Romanian Communist Party – n. a.). More specifically, young people, and not only, were engaged in meetings, in compulsory political activities. We participated in national holidays and festivals whether we wanted to or not. We were forced to do these things and we could do nothing to avoid them”.

And yet, interesting to note is the fact that precisely the relations between the members of the community, the people living during those times, are some of the aspects research subjects recalled full of nostalgia, or even full of regret, as it can be noticed out of the following examples:

S40: “Back then people were closer to one another, they were getting along better. Because of the hardships they had to face, there was a lot of compassion and they helped each other”.

S28: "The friendship relationships got consolidated not only during the time spent at school (n. a.: S28 worked as a teacher), between peers, but also due to the meetings at the culture home of the village, where we used to coordinate spectacles involving dances, singing, chorus. (...) There was something about these relationships, because they were warm and they brought people together, families got to meet each other. But nowadays one cannot find such things anymore, not even in the rural areas".

Thus, according to S28's memories, these activities imposed by the communists, such as the cultural shows, were bringing their contribution to getting people together. Her opinion is supported by other views: several subjects recall 'the charm' relationships between people had back then, despite the hardships they had to face. Still, this recall is contradicted by the memories of other research subjects, who assert that the human relations were profoundly affected by the fear of talking to other people, except for the close members of their own families.

All these aspects, and the entire analysis of the biographies, show us how history is being lived in a *subjective* way by every person, and how the same reality is being lived, valorised and interpreted in a different way by our subjects. This confirms one of the basic premises of the constructivist perspective in sociology, according to which reality is socially built and reproduced by people, according to their own knowledge, interpretation and experiences. Human beings give their own meaning to things and phenomena that make up the surrounding world.

### **Products and artefacts of popular culture in Romania during the communist period**

One of the popular culture products that can be grouped under the label 'resistance', criticising and mocking the communist regime, with its 'great achievements', and especially Ceaușescu and his family –in the last stage of communism in Romania, were the jokes. Jokes are some of the key-places for producing meaningful and wise popular sayings, and the laughter they cause is based on a subversion of their objective structure (Sparks, 2000: 38). But during the communist regime jokes were not only meant to induce laughter, they were more than that: they represented, at the same time, some sort of tacit connection between people, a way of communication meaning 'you are not alone, we all think this way (we oppose the regime, we are anti-Ceaușescu, anti-communism etc.)'. Jokes are elements of the popular culture in every society, and in the communist/socialist system people adapted jokes to their conditions, as a way of rebelling and opposing. They opposed this way not only the social system, but the leaders too, especially Ceaușescu. As they represented some of the few elements of popular culture meant to resist and oppose the system, their importance must not be minimized. On the other hand, one has to admit that they were a passive way of resisting: they did not tell people to do something that might signify a form of social activism, they were rather a way of escaping, venting out, some sort of irony

or even self-irony, a way of positioning oneself against the regime, or anti-Ceaușescu, not in the public space though, but only behind safely closed doors or in environments considered as 'safe'.

The analysis of the biographies shows the fact that jokes referring to the communist regime were being recalled especially by the younger research subjects, the ones who lived, from the communist period, in Ceaușescu's time. The subjects who were born before the Stalinist period of the communist era remember the terror inflicted upon the population during those days, because of the constant 'hunt for witches', not to mention the 'aggravation' of the '*class struggle*', when those individuals who were thought to be '*bourgeois elements*' and *anti-communists* could be taken and just disappear forever. Therefore, during the Stalinist period, uttering such jokes or even laughing when hearing them was taken with a grain of salt. Several subjects remembered that at that time people used to think that the jokes were being told by the political police's informers, in order to see who laughed at or clung to those ideas, so doing this went against the system.

S3: "There were many jokes with implicit meaning, but one had to prevent oneself from laughing too loud when hearing them, because many of them were just mere challenges. The informers of the *Security* themselves used to utter them, they «had made a pact with the devil» in order to spy on the population and contribute to the «great achievements» of the communist party".

In what the jokes recalled by younger subjects are concerned, they can be classified in two main categories: a) general anti-communism jokes (anti-ideology, anti-propaganda and so forth – such as example no. 1 below) and b) anti-Ceaușescu jokes. The second category has its own sub-categories: there were jokes that used to aim at Ceaușescu's 'intelligence' and his lack of education (examples 2 and 3); jokes that used to portray the difficult life people led at Ceaușescu's time, heavily contrasting with what officially and propagandistically was labelled as 'golden age' or 'the age of great fulfilments' for Romania (examples 4 and 5 – recalling the endless queues the population had to put up with in order to buy basic food products, respectively referring to the desire of fleeing the country somehow – because the borders were closed and under strict surveillance at that time); then there existed the jokes that used to reveal the true opinions people had when it came to Ceaușescu, a critical and opposing one, contrasting heavily with the official propagandistic attitude according to which Ceaușescu was 'the most beloved son of the Romanian people' (example no. 6):

Example no. 1 – S23: "Communism, Socialism and Capitalism set up a date. Socialism arrives fashionably late, all sweated and crumpled, excusing himself: «Sorry for being late, but I was *queuing* to buy *meat* ». Capitalism asks: «What's a queue? ». And Communism asks: « What is meat? »".

Example no. 2 – S62: “Nicu and Leana<sup>1</sup> were on a plane, accompanied by a homologue from a friend state, flying above a jungle. By mistake, Nicu drops his shoes overboard. The president of the state they were visiting is asked to mobilize all his troops in order to find that pair of shoes. He asks: «Why don't you buy another pair?». «I'm very attached to the ones I dropped, they were my graduation diploma», answered Nicu”.<sup>2</sup>

Example no. 3 – S57: “A detainee gets to the Danube-Black Sea Canal<sup>3</sup>. The commandant in charge welcomes him: «I see you've received a sentence of 50 years of forced labour. What's the reason?». The detainee answers: «I said that Ceaușescu is an idiot and they gave me 10 years for insulting the prime-secretary, 10 years for insulting the party and 30 years for divulging the state secret!»”.

Example no. 4 – S35: “Question: Why is there a minimum distance of five kilometres between every two stores in Romania? Answer: – So that the queues won't mix up”.

Example no. 5 – S37: “Rumour has it that during the communist period they wanted to build a highway to connect Bucharest to Berlin, with four lanes: three for going to Berlin and one for outrunning the other cars”.

Example no. 6 – S29: “During Ceaușescu's regime they made a postal stamp with his picture. The dictator goes to a postal office, undercover, to see how sales are going. «It does not sell well», says the clerk. «Why is that?» «It does not stick». Then Ceaușescu asks for a stamp, he spits on it, puts it on an envelope and shows it to the clerk: – «Why do you claim it does not stick? Look, it sticks nicely» «Yes, says the clerk, but everybody spits on the other side of the stamp»”.

During the communist period there were created also other elements of resistance popular culture, shorter ones, such as sayings (short phrases in rhyme,

<sup>1</sup> “Nicu” or “Nea Nicu” and “Leana” or “Leana” are the nicknames used in jokes and in colloquial speech for Ceaușescu (Nicu is a diminutive from Nicolae) and his wife, Elena (“Leana” is a popular appellation for Elena).

<sup>2</sup> The propaganda portrayed Ceaușescu as being a person with bright intelligence and some sort of scholar/ erudite (officially there are a couple of books «written» by him) but in fact his educational background consisted of elementary school (four classes), and the only trade he had learned was that of shoemaker.

<sup>3</sup> “The Danube – Black Sea Canal” is a navigable canal connecting the ports Cernavodă (on the Danube) and Constanța (from the Black Sea), shortening the waterway to Constanța by ~400 km. This is one of the greatest projects of the socialist regime, started in 1949. Most of the workers were political detainees taken out of communist prisons and forced to work there. The project got cancelled in 1955 and it started again in 1976, at Ceaușescu's initiative. Detainees from prisons kept working there. The Canal was opened on the 26<sup>th</sup> of May 1984, in a period when the Romanians were facing serious life restrictions. In the official propaganda, the canal was presented as one of the great achievements of the communist regime and referred to as *the Blue Highway* (in Romanian ‘Magistrala Albastră’).

usually) where people metaphorically expressed general statements related to day-to-day life, behavioural norms etc.:

S62: "It was hard with der, die, das, but it's harder with davaiceas".

S61: "Who has a loose tongue is gonna work for five years in the salt mine"  
(in the Romanian original this saying is in rhyme – n. a.).

The first example mentioned above recalls the compulsory obligation of learning Russian in school, and it also mocks it at the same time. The second example expresses, in a metaphorical way, the fear of talking in a free manner (loose tongue), because of the danger of getting in prison (where one had to work really hard, for instance in a salt mine).

In what certain folk products and artefacts are concerned, connected with the lifestyle of the people, our research reveals interesting aspects regarding handmade products or items created by people during the communist period. Through the guide who structured the biographies of this research the stress was put on the dressing styles and haircuts, artefacts, products and commodities in this respect, and not only on themselves, but also on their roots, or from where they had been inspired. In this regard, the research has shown that there existed major differences between the research subjects born in different periods of time, and there could be assessed gaps between generations. While the subjects who were born before the Second World War told us that they managed to keep certain traditional products and habits in what the way of dressing and the haircuts are concerned, the subjects who were born after the war turned out to be more open-minded towards changes and various influences. The more recent their birth date, the more powerful the influence from foreign trends.

At the beginning of the Stalinist period, because of the drastic conditions that accompanied the implementation of the Stalinist model in the society, the lifestyle people had was simple and filled with shortcomings. When referring to the ways of dressing, the biographies show us that traditional ethnic costumes were still spread across the country, especially in the rural areas, and they were handmade at home, most of the times. In urban areas, not only aliments were given 'rationalized' on ration books, but also clothing and other types of merchandise.

S3: "Because of poverty and all sort of shortcomings, our clothes were manually woven and sewn by our mother, while our peasants' sandals ('opinci') were made out of pig skin, which we used to wear when going to the school or at the church, especially in winter time. During the summer we went barefoot, to prevent them from becoming all worn out".

S6: "Not only the food market, but also the clothes one, had its merchandise rationalized and distributed via cards ('ration books'). The rations were

small, the quality of the products was poor and the queues in front of the stores were huge”.

Besides wearing popular costumes and handmade shoes, or clothes of poor quality bought with their ration books, people had kept, during the first stage of socialism, the traditional line in what their haircut was concerned: men wore their hair short, covered by a hat, and in winter a traditional astrakhan cap (made out of sheep fur), while women had long hair, braided in one or two tails. The married women residing in rural areas used to wear a scarf on their head whenever they left the house.

Despite the fact that reminiscences of such traditions still exist in rural areas and are respected by older people, these popular styles were heavily influenced by the phenomena that marked the modernisation of the society, even during the communist period: urbanization and industrialization. The changes emerging in the ways of dressing and haircuts started from the urban areas and got accelerated once Romanian socialism got into the second stage, that ‘relaxation period’. This has been characterised by historians as a ‘loosening’ interval, especially on the political and cultural levels: there was an ideological outdistancing from the ‘big brother’ from the East, and a giving up the sustained ‘Russification’ campaign. This made possible both the rehabilitation of national values (rewritten or even banned until then) and the opening towards Western values. All these aspects turned that period into a progressive and modern one, especially in what the cultural level is concerned. As such, Western influences in Romanian popular culture were also possible, as evidenced by the biographies analysed. For example, new dressing styles and haircuts started to be adopted, which followed, to a certain degree, the trend set by Western societies, particularly the French one – especially at the beginning of the period considered (late 50’s – early 60’s).

S10: “When I first saw a fashion magazine in my life, I thought there couldn’t be a bigger miracle. I know it was French, but unfortunately, I don’t remember the name. Neither when that happened I know exactly, I think it was at the end of the 1950s”.

S26: “Pleated skirts were fashionable, inspired by the French models. I also liked tight dresses, tailored after the French pattern – what fine cuts and lines, such elegance...!”.

S25: “I used to have my hair cut in a style called «French cut»”.

Adopting Western dress and haircuts trends was a practice that began during the relaxation period at the end of ’50s and at the beginning of the ’60s. The ’70s are marked, for example, by the embracement of hippie and rock style by young people, both in haircuts (long hair, tresses, locks, both for girls and boys) and in clothing (tight and flared trousers, wide shirts, etc.).

S32 (man): “Around the years 1974–1977 I had long hair and even a beard”.

S47 (man): “When I was young clothes were weird in comparison with today’s fashion. One used to wear tight, flared trousers, loose-bodied shirts and shoes with double soles. Back then it was fashionable for men to have long hair”.

By the end of the ’70s, along with Western disco music, the disco style started to emerge also in Romania, influencing not only the clothes, but also the haircuts, mostly those of women: very short (‘mini’) dresses and skirts, stilettos or sandals with very thick soles and tight jeans in the ’70s – early ’80s, respectively jeans or other types of pants with high waistline, colourful or metallic shine leggings, blouses and dresses adorned with glittery ornaments, XXXL size T-shirts with messages written on them and deep plunging necklines, ‘bat wing’ sleeve tops and so forth – in the ’80s.

S53: “The clothing was in accordance with the fashion of those years, that is, flared trousers, made of «tergal» material, jeans and striped pants. The men used to wear long hair or cut it in the «French way», while by women fashionable were the curls, made using hair rollers”.

Despite the fact that some Western fashion and hair trends managed to influence people in Romania, there were very few Western clothes and generally Western commodities on the Romanian market. Mostly, clothes were produced in Romania or imported from other socialist countries. In the ’80s, however, during Ceaușescu’s regime of restraints, not even Romanian clothing products were available, at least not too many, varied or having a good quality, because they were exported to a large extent within the framework of Ceaușescu’s determined policy of paying all the country’s external debts. The lack of clothing items in stores was supplemented, throughout the socialist period, by the practice of making clothes by a tailor (either by single-handed tailors in villages, or in tailoring shops in cities).

S29 (woman): “The cuts of our clothes were very simple, if you wanted something special, you had to place an order. Another way of getting such items was getting into contact with people who went abroad because of their work. Those people always got back with things to sell. (...) I liked the most the fashion of the ’60s–’70s, when cone-shaped skirts in knee length were so fashionable, combined with very high heels stilettos, overcoats tied with a very broad belt underlining the waistline, curled hair rolled towards the exterior. The star who had an influence on my way of dressing was Sophia Loren”.

S54 (woman): “Back then the clothes were made at the seamstress or you knitted them yourself, and you had to have a lot of imagination to look good. There were only a few models and colours to buy at the fashion house”.

S21 (man): “The clothing of that period used to be common, poor, we were all looking the same, as if we all had some kind of uniform. Rarely was it possible to find good quality merchandise in the stores, they usually brought in what was not accepted for the export. The whole Romanian industry was working 90% for the export”.

S32 (man): ‘The way of dressing was modest in terms of material quality. After I started to have a salary, in 1966, I used to go to the tailor and he made the trousers and even accustom suit the way I wanted them, because the items I could find on the socialist market were all the same, as if they had used only one pattern, in some sort of contest, Stakhanovite – who makes more suits in the same amount of time. (...) I also had a friend who was a sailor, I bought jeans from him a couple of times”.

S56 (man): “There was no way to get Western clothes back then, especially for the people living in the rural areas”.

During the whole socialist period people also wore handmade clothes, knitted or crocheted. In the first years of communism this practice was, in villages, a continuance of the Romanian peasants’ tradition of homemade clothes, and in towns an answer to an unsatisfied need, given that at the beginning of the communist era, ready to wear clothes were sold on ration books, and later the offer was insufficient and unsatisfactory. As time went by, knitting clothes, especially those made out of special knitting materials, such as mohair, became a part of the fashion, a general trend.

S25: “A casual daywear was made of knitted sweaters, made out of wool or mohair, and trousers of cotton and cloth. Wintertime was the season of wool knitted trousers”.

Still, especially in the rural area in the first stage of communism, many clothing items were manually made up and knitted rather as a response to the basic human needs for warmth, than to some fashion trends. As a female research subject revealed (see the quote below), in the 50’s even underwear was not to find in stores.

S15: “I am sure it seems unbelievable today, but at that time there was no underwear in the stores and then I went to the cooperative<sup>4</sup> and bought materials (textiles – n. a.), or my husband did that in the cities where he went, he was a driver, and with these materials and I used to make underwear, as well as baby clothes, diapers, pants and so on”.

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<sup>4</sup> What was called “cooperative” – one of the meanings, besides that referring to the agricultural form of ‘association’, i.e. joint working for the community, or rather for the state – in the communist Romanian villages was the only store in a village, state-owned, a sort of universal store in which the most diverse products were found, from food to clothes, stationery and varied household items.



Besides clothing, people living in rural areas continued to create at home various items useful in every household, such as carpets, small rugs and bed covers. The quote below offers us also an example of eating habit generalized in the Romanian rural area.

S29: "Everything was homemade: woven carpets, pillows, blankets, Romanian traditional blouses, underpants (made with the help of weaving machines). Wool was spun and out of it women used to make sweaters, jackets, socks. We rarely could find flour, so we did not eat bread too often, but we were eating corn flour boiled in water («polenta») on a daily basis: my mother used to cook it in a special dish, then put it down on a wooden board and cut it using a thread".

Therefore, the creation and/or appropriation of the products and artefacts of popular culture in Romania during the communist period was in some cases influenced by the phases through which the Romanian socialism passed, while in other cases that was independently of these stages. So, the clothing products of Western origin were absent from the Romanian communist society regardless of the phase, while the wearing apparel as such, as well as the hairstyles, followed the Western trends, starting with the so-called relaxation period of the 1960s. These trends have been taken over and adapted sometimes in different forms even in the Romanian socialist society.

Besides the practices of popular culture imposed by the communist regime, such as comrades 'meetings, group activities that were meant to 'benefit the society', marching on, celebrations occasioned by various pretexts and so on, there existed also artefacts and items of popular culture in the communist Romania that were set by the authorities by all possible means of propaganda, including through mass media. During the Stalinist period the leaders of the country tried not only to impose elements of Soviet culture (including aspects of high culture, such as Russian literature, but only certain editions, not all of them), but also to impose some ideological products, that they wanted to turn into popular culture, such as slogans, patriotic songs, militant songs, etc. Some slogans from that period managed to remain in the collective memory of people, though not because they used to believe in them at that time, but rather because they were repeated without cease, in an excessive and continuous manner, by the official propaganda sparked by the leading party. Two of the slogans were present in many biographies that have been analysed: 'Stalin and the Russian people have brought us our freedom' (official slogan), respectively 'Ana Pauker<sup>5</sup> and Dej, scared the daylight out of the bourgeoisie'<sup>6</sup> (slogan created by the people).

<sup>5</sup> Deputy prim-minister and external minister of Romania between 1947–1952, Ana Pauker is considered to have played a dark part in Romania's history, bringing numerous prejudices to the country. At the same time, she is thought to have played a very important part in imposing brutal measures of repression characteristic to the Socialist-Stalinist regime, right from their very beginnings. Since she ruled the country with an iron fist, she was given the nickname 'Stalin with a skirt'.

<sup>6</sup> Both slogans sound like very short poems in rhyme in the original Romanian language.

Other slogans and themed sayings that emerged during the first stage of Romanian communism were referring to the ‘friendship between socialist peoples’, one of the basic ideas of the Soviet ideology, or they were used in order to attack the ‘exploiting’ system of capitalism.

S13: “The slogans were anti-capitalism, they were worshiping «the big brother from the East», Soviet technology, they used to advise people to work (for instance, I remember the absurd saying «a five year’s norm in four years’ time»), or they criticized «lazy» people”.

Such slogans were anyway hard to believe, for people they were less credible, all the more so, according to the stories of some of the research subjects, the members of the new ruling party, the Communist Party (including the leaders), were people less appreciated in the community, usually, as seen in the quotation below, those without work and without education, lazy and even delinquent. The policy of ‘healthy origins’ has encouraged the co-optation with priority of such persons in the party.

S2: “The local communist leaders were in fact the «scum» of the society: the sluggards, the delinquents, the paupers, the tatterdemalions. They «barked» and defended the Soviet slogans vigorously for their own interests. Common sense people, who worked hard to put something on the table, looked at these slogans with indifference”.

The coming to power of Ceaușescu and the change of optics in the Romanian politics, especially with regard to the USSR, led to imposing of new slogans, sayings and patriotic songs through the official propaganda. This time, obviously, the slogans and propagandistic songs did not focus on Stalin anymore, who had already fallen into disgrace, nor on the friendship between the socialist peoples, but on the Romanian Communist Party, having Nicolae Ceaușescu more and more in the centre, as his cult of personality and his dictatorial regime after 1974 progressively increased.

S59: “When I was a child I used to go to the cultural home to watch movies, but before the movie started, there was a kind of preview, where communist slogans were put, about Ceaușescu and the Romanian Communist Party. (...) Patriotic songs, communist slogans were broadcast all the time, but people ignored them”.

S46: “The frequent slogan was «The Party, Ceaușescu, Romania!». It was chanted at rallies, it was contained in patriotic songs. It was broadcast on radio, on TV. On the walls of the factories there was written «Long live the Romanian Communist Party!». At meetings and demonstrations we were forced to «shout» slogans like «Ceaușescu– PCR<sup>7</sup>!» or «Ceaușescu and the people!». As if he cared about the people...”.

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<sup>7</sup> Commonly used abbreviation for ‘The Romanian Communist Party’.

S30: "I remember some slogans: «Let's do everything!»; «No work without bread, no bread without work!»; «The Party, Ceaușescu, Romania!». They were insistently broadcast on radio stations, TV, not to mention the newspapers, they were full of propaganda. But people's opinion about them was unanimous: disgust + jokes at their expense".

As with the Stalinist slogans and songs, the population did not believe in the slogans and songs about Ceaușescu either. As the research subjects remember, although these rallying cries were permanently broadcast on radio and television, publicized through newspapers and magazines, printed on the first pages of textbooks, or presented even as previews of movies broadcast in cinemas (or through the movie caravan), for the people they were empty of content, nobody really paid attention or listened to them.

### CONCLUSIONS

According to the life histories analysed in this paper, Romanian popular culture in the communist epoch between 1947 and 1989 was influenced both by the three distinct stages the communist regime has been going through in this period, and by some large-scale phenomena that led to transformations in society, namely industrialisation and urbanisation. A historical continuity of the pre-World War II monarchic period in popular culture could be ascertained regarding some practices, particularly those of folk culture, such as 'balls', 'dances', 'round dances', 'soirees', the rituals and habits celebrating religious events, the practices and customs related to mythological beliefs and the ones connected with agricultural works and traditions, various eating habits, etc. All of these had also certain independence as regards to the phases of the communist regime in Romania. The same can be as well said about some products and artefacts of folk culture, such as handmade clothing, various household commodities and appliances made by hand, hand painted Easter eggs, traditional food, both in daily life and on the occasion of various celebrations, and so forth. Regarding these products and artefacts could be ascertained, as well, both a continuity between the monarchical period prior to World War II and the socialist period, and a certain independence from the distinct phases of Romanian communism. Furthermore, other popular culture practices and products had been adapted and reinvented, so that they would not interfere with the communist prohibitions and in this way, they could be further practiced or manufactured. For example, celebrating religious holidays in private circles, changing the name of Santa Claus to 'Father Frost' and postponing his coming on the eve of the New Year, or changing the texts of carols and songs used in traditional customs and habits related to religious holidays.

However, the analysed biographies of people belonging to different generations reveal a gradual transformation even in these practices and artefacts of

deeply traditional folk culture. This social shift was due nonetheless not to the influence of the distinct, different phases of the communist regime, but rather to the modernization of society as a whole. Romanian society followed the generalized trend of the industrialised world, despite the fact that Ceaușescu's totalitarian regime tried to keep the population of Romania as far as possible from such influences. For instance, 'ballrooms' were gradually replaced with discotheques, especially in the urban area, and traditional clothes, usually made at home, replaced with modern clothes that, although not available in stores, were at least made to order by tailors after Western models (many research subjects recalled particularly the French models).

This Western influence during the Romanian communist period could be ascertained especially after 1959, when a 'relaxation period' in the communist regime began. This loosening stage brought a distancing from the Soviet control, at the same time with a relative openness towards the Western world. However, getting to know Western popular culture trends did not occur via direct contact, but more via mass media, especially music and cinema. The music and the films managed to set the tone and trends of ways of getting dressed, shoe wear, haircuts, dance, social activities, preferences and so forth. They have shown the lifestyle and the general trends characterising modern industrialized societies, and the Romanians, especially the young people, could not be turned back once they had turned on this path. Things stayed like this even during the dictatorial regime of Nicolae Ceaușescu.

In what the effective use of Western popular culture products is concerned, our research shows that no matter what stage the communist regime was crossing, there was no real mass contact between the Romanians and the products of the Western societies. From time to time, and in small quantities, such products were brought and sold in Romania, in various ways (by few people that had the chance to travel abroad, or in shops that sold their goods in foreign currency, so they were accessible to an extremely small number of Romanians), but the majority of the people did not use (and did not have access to) such products. Despite all these aspects, some Western models were known, especially through mass media, but also due to the ways of communication between people. Knowing them made people, principally the young ones, to use them as patterns. Moreover, Western models were used like this not only by individuals, but also by socialist factories. For example, in Romanian factories some sorts of jeans were produced, that tried to follow the pattern of the American ones, or the soft drink 'Cico' was produced instead of Pepsi-Cola, which was known on the Romanian market, but almost impossible to find. Thus, there was an appropriation, specific for those times, by the Romanian population of the practices and products of Western popular culture.

On the other hand, the practices, products and artefacts of popular culture imposed by the communist regime did not become really 'popular', they were ignored or rejected by people: the slogans and sayings praising the communist

regime and Ceaușescu were omnipresent, mass media and public gatherings were filled with them, they had to be chanted at rallies and meetings, but no one seemed to believe in them, they were just shouted and listened to, without hearing them properly. The same happened in the case of patriotic songs, or with the 'ordered' artefacts, as well as with the enforced cultural practices. Consequently, they were abandoned as soon as the communist regime fell. But something interesting resulted from the analysis of the life histories: some of these imposed practices, such as the celebrations and the contests involving the community and the pupils or students, made some of the research subjects feel nostalgic: not the practices themselves, but the human relations built by the means of these practices, relations which, at present, according to those subjects, have lost their warmth and even their humaneness.

#### LIMITS OF THE RESEARCH

All the data presented and analysed in this paper should be interpreted considering the specific limitations of life histories' method. As in assessing other phenomena using the same method, here too the autobiographies are *subjective* depictions of the reality, and that means they can be affected by the *intervention* of the research subjects, both in what *selecting* the events is concerned, but also in *presenting*, *combining* and *interpreting* them. Thus, the biographies do not offer facts, but representations of the subjects about themselves and about the environment and the background surrounding them. Moreover, as these are *à la longue* recounts, covering several decades and including childhood and youth, it is possible that the research subjects assign in their memory the past events affective values more intense than they were in real life – in many cases, positive ones, hence the nostalgia. Therefore, the precaution of methodological limitations should be taken into consideration in the formulated interpretations and conclusions.

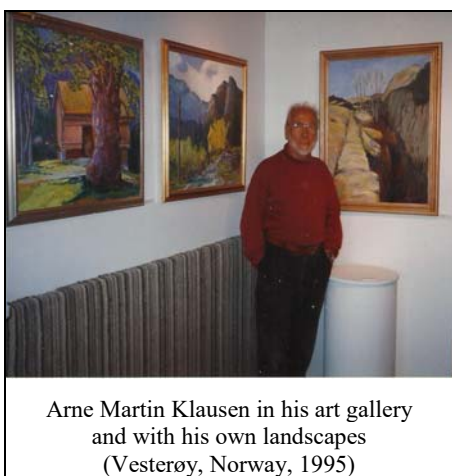
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## ANTHROPOLOGICAL RESEARCH AND TEACHING IN NORWAY

ARNE MARTIN KLAUSEN



Arne Martin Klausen in his art gallery  
and with his own landscapes  
(Vesterøy, Norway, 1995)

### INTRODUCTORY NOTE

**Arne Martin Klausen** (1927–2018) was Professor of social anthropology at the University of Oslo and Director of Museum of Anthropology in Oslo. He was also a member of the Norwegian Academy of Science and Letters.

Arne Martin Klausen's beginning in anthropological career was marked by the analysis he undertook on Carl Lumholtz's collection of 1,381 plaited cane objects in the University Ethnographical Museum in Oslo. In 1957 this effort resulted in the writing: *Basket-work Ornamentation among*

*the Dayaks*, Oslo, Forenede Trikkerer (Studies honouring the centennial of Universitetets Etnografiske Museum, Oslo, 1857–1957, vol. 3). (It is to be mentioned that Carl Lumholtz was a Norwegian ethnographer doubled by a passionate photographer with explorations in the regions of Australia and Mexico, and the Dayaks are ethnic groups located in the interior of Island of Borneo.)

In the 1960s, Arne Martin Klausen carried out fieldwork in Kerala, on the southwestern coast of India. Kerala is a small state, but it assures a consistent part in the Indian production and marketing process of fishing. First he wrote an article – “Technical assistance and social conflict: a case study from the Indo-Norwegian Fishing Project in Kerala, South India”, *Journal of Peace Research*, 1 (1), 1964. Later on, in 1968, he dedicated to this topic *Kerala Fishermen and Indo-Norwegian Pilot Project*, vol. 1 of the series PRIO Monographs, Oslo: Universitetsforlaget / London: Allen & Unwin. The book was well received as an illustration of applied anthropology.

The most successful among Klausen's works were those dedicated to the Norwegian ethos. In 1984 he edited *Den norske væremåten. Antropologisk søkelys*

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*på norsk kultur* (Oslo: Cappelen) in his native language. In 1991, this writing appeared in French, too, under the title *Le savoir-être norvégien. Regards anthropologiques sur la culture norvégienne* (Préface de Gabriel Gosselin, Paris, L'Harmattan). The so-called "national character" of the Norwegians, i.e. their loyalty toward tradition, equalitarianism, ritualization in the context of industrialization, the status of the *bygd* (local hypostasis of community), etc. are discussed in the ten chapters of the book.

Apparently different, the volume *Olympic Games as Performance and Public Event. The Case of the XVII Winter Olympic Games in Norway* (edited by Arne Martin Klausen at New York & Oxford: Berghahn Books, 1999) proves in the end to be profoundly correlated to *Le savoir-être norvégien*. Before the Winter Olympic Games that took place in February 1994 at Lillehammer, Professor Klausen was invited to elaborate a research project with the theme "Olympic Games and Culture". He embraced the project enthusiastically. The challenge was consisting in studying the impact between the universalist mega-phenomenon of Olympism and the deeply autochthonous trend of the Norwegian ethos. In a post-Games conference, Professor Klausen asserted: "In a paradoxical way, the winter games at Lillehammer became an occasion for revitalizing Norwegian traditional identity and its symbolic expressions, and at the same time an arena for demonstrating our modernity. And as always, we did it our way!" (typewritten text). Largely, the book on Winter Olympic Games benefitted from many appreciations (among them: the review signed by Arina Raluca Pancu and Gheorghiță Geană, in the journal *Sociologie Românească* [Romanian Sociology], vol. V, no. 1, 2007, pp. 158–162).

However, it should be noted that Professor Klausen's preferred topic in the academic field of socio-cultural knowledge was art. Besides his *Kunstsosiologi* (Oslo: Gyldendal Norsk Forlag, 1977), he formulated *5 – Five reflections on art* (Oslo, no date), wrote about artists, hold a gallery in his residence on the island of Vesterøy (where he organized in 1995 an exhibition of glass paintings by the Romanian woman artist Titi Simionescu), and above all he himself was a master of landscape. His wife, Liv Vold Klausen, was herself a talented sculptor – in 1994, before the Oslo EASA Conference, when I was hosted in their cottage from Vesterøy, I met a cluster of stones situated on the lawn around the house: engraved by Liv with human faces, they seemed to be looking at me with kindness... And I should not leave out Klausen's daughter, Bente, who was/is also a master in the art of textiles.

At this point, the arising question is: which are the traits that recommend Arne Martin Klausen as a representative figure of the Norwegian anthropology? At least two such traits are identifiable. Priority can be ascribed to his loyalty towards the Norwegian ethos. An argument is his preference for writing so much in the Norwegian language. Nevertheless, in approaching the subtle theme of national character he involved in a perfect equilibrium the sentimental and the rational perspectives. The other trait is his engagements in the public life, both in the national



and international framework; thus, in his youthful years he was an active figure of Peace Research Institute of Oslo (PRIO) – under the aegis of which he developed the above mentioned research on Kerala. Also, he was the governmental representative in the Norwegian National Commission for UNESCO; from this position he elaborated an important document of applied anthropology: 1995, *Socio-Cultural Factors in Development Assistance*. Oslo: The Norwegian National Committee of the World Decade for Cultural Development, 34 pp. – in imperial octavo.

In a synoptical view, “Klausen tried to teach a generation of anthropologists that they should be quintessential intellectuals: their job at home consisted in approaching society from a slanted angle, saying unexpected and sometimes unpopular things, adding width and depth to society’s self-reflection” (Thomas Hylland Eriksen, “The otherness of Norwegian anthropology”, in: Aleksandar Bošković, ed., *Other People’s Anthropologies: Ethnographic Practice on the Margins*, New York / Oxford, Berghahn Books, 2008, p. 175).

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In the autumn of 1976 Arne Martin Klausen made a professional visit to Romania. On that occasion, on 30 September, he delivered a guest lecture at the Centre of Anthropological Research (today “F. I. Rainer” Anthropology Institute of the Romanian Academy, Bucharest) on the history and state of things with anthropology in Norway. With a naturally charismatic and smiling figure, the distinguished lecturer gained instantly the sympathy of the auditory. (*Inter alia*, he was glad to discover in the library of the Centre the work of his compatriot and forerunner Gutorm Gjessing, *Socio-Culture: Inter-disciplinary Essays on Society and Culture*, Studies Honouring the Centennial of Universitetets Etnografiske Museum, Oslo, 1857–1957, Volume I, Oslo: Forenede Trykkerier, 1956.)

Recently, I have discovered in my personal archive the typewritten version of the basic text which Professor Klausen relied on in his discourse. The elapsing of time made of this text, obviously, a historical document, but not an anachronical one. Beyond its value of chronological testimony, the main ideas – regarding the research tasks, educational problems etc. (according to which I fragmented the text) – are essentially “alive”. If so, its publication is a salutary *restitutio*. More recent contributions *à vol d’oiseau* regarding the state of things with Norwegian anthropology (e.g.: Thomas Hylland Eriksen. 2008. “The otherness of Norwegian anthropology”, in: Aleksandar Bošković, ed., *Other People’s Anthropologies: Ethnographic Practice on the Margins*. New York / Oxford: Berghahn Books, pp. 169–185; or Signe Howell. 2010. “Norwegian academic anthropologists in public spaces”, in: *Current Anthropology*, vol. 51, supplement 2, pp. 269–277) do not invalidate Arne Martin Klausen’s outlook; they rather reiterate it.

**(Gheorghiță Geană)**

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The Ethnographical Museum of the University of Oslo, founded in 1857, is the oldest anthropological institution in Norway. Like many other ethnographic museums in Europe, its collections originally resulted from the contact made with non-European cultures by missionaries, colonial officials, and explorers. Norway has never actually been a colonial power, nevertheless the museum can be said to have the same culture historical sources as the great museums in colonist countries such as Britain, the Netherlands, and Belgium.

During its first fifty years, the museum was run by historians. It was not until 1902 that a chair in ethnology was founded; administration of the museum was also an important part of the job at that time. The first fully qualified anthropologist – educated in Germany – was Ole Martin Solberg (1879–1946). Prior to and just after the Second World War, he was instrumental in educating several Norwegian anthropologists while at the same time actively building up the museum's collections. Very early on, the museum contained collections from Norwegian folk culture, but these were transferred to the Norwegian Folk Museum after its inception in 1894. In 1951, the Lapp collections were transferred on the grounds that the Lapp culture, too, was a part of Norwegian culture. Today, therefore, the Ethnographical Museum's collections are entirely non-European.

The ethnographical collections in Oslo number, to date, some 40,000 catalogued items. The largest and most representative collections are those of Carl Lumholtz's from Borneo, Roald Amundsen's from the central Eskimoes (netsilik), P. O. Bodding's collection from Santal Parganas, India, the Madagascar collection, and partly The African collections, especially that of the Congo.

The museum has an appointment of seven academic posts and a corresponding number of positions requiring technical personnel. One of the academic posts – the museum lecturer – is responsible for the museum's external activities. A large number of schoolchildren visit the museum each year. A project that has attracted particular interest is a special facility arranged for pupils from the blind school. A suitable selection of objects that the blind can actually take in their hands and feel has been displayed in a couple of departments.

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Anthropological research in Norway right up to the present time has been directed essentially towards the study of non-European cultures. Because Lapp culture differs from Norwegian culture in language and also in other important respects, in Norway this culture variant is still part of the anthropologist's field of study.

The subject area known in Norway as ethnology, or *folkelivsforskning*, has been devoted mainly to the study of our own culture but with some material from

other European areas for comparison. In my view, ethnographical research in Hungary and other East European countries covers an area somewhere in between these two research traditions. In Norway, they have been regarded as two distinct disciplines since the Second World War.

Norwegian anthropological research and teaching has in many ways followed the development pattern typical of that in large areas of Europe and the United States. The first qualified researchers in anthropology studied both the physical and cultural sides of their subject. *Evolution* and *diffusion* characterized Norwegian anthropology in the years before the Second World War, when the country's contact with German research was stronger.

With the culture historical orientation of anthropology and the ethnographical collection's near connection with the Norwegian archaeological collection – both are housed in the same building – it seemed natural that among the candidates for the professorship after Solberg was an archaeologist, namely the renowned Gutorm Gjessing. He was born in 1906 and in 1947 was named Solberg's successor as museum director and professor. He remained in office until 1973, during which time Norwegian anthropology changed quite radically. Also at that time, the number of qualified anthropologists increased to the extent that today there are something like fifty anthropologists doing research work at the university and other institutions.

Change after the war in the main gave priority to the study of living society over that of culture historical studies a trend that presupposed close contact with the archaeologists. The nearest related discipline was sociology. It is claimed that the strong standing of social anthropology in Britain was the reason sociology as a separate discipline was late in being introduced to universities there. Even though the university structures in Norway and Britain are very different, a Norwegian student with a university degree in social anthropology will have studied very much the same literature as a British or American MA or PhD student. The Norwegian degree (*Magistergrad*) has standing somewhere in between the two Anglo-Saxon degrees. English words and expressions have made great inroads into Norwegian scientific terminology, partly because most of the literature read is in English and papers published are for the most part also in English.

Just after the war, Solberg's pupil, dr. Johs Falkenberg, born in 1911 and presently head curator at the Ethnographic Museum, put forward the then current viewpoints in British social anthropology, those of Malinowski and Radcliffe-Brown. But it was only after about 1950 that the British/American influence made itself felt with such force. It was largely due to a number of circumstances. Gutorm Gjessing had had a period of study in America behind him when he took over the professorship and arranged contacts with eminent American "cultural anthropologists" such as Robert Redfield and Ralph Linton. Later on, professor Gjessing lectured at the London School of Economics thereby establishing the first contact with British social anthropology. Modern Norwegian social anthropology nevertheless has something of the same scope as American culture anthropology if linguistics, folklore,

and archaeology are excluded from the subject area. Today, physical anthropology is wholly considered as a discipline within medicine.

Indirectly, the American influence also came by way of the close connection there was between Norwegian and American social and political science.

Despite the fact that most social studies have been influenced mainly by the United States, anthropology in Norway has received its greatest impulses from Britain. This came about through the teaching of professor Fredrik Barth, born 1928, who received his MA from the University of Chicago and his PhD from the University of Cambridge. Professor Barth was affiliated to the University of Oslo before he became professor of social anthropology at the University of Bergen in 1962. At Bergen, he built up a new, firmly established research institute before he returned to Oslo in 1974 to succeed Professor Gutorm Gjessing as professor and director of the Ethnographical Museum.

This institutional blossoming continued after the establishment of the professorate in Bergen with its own institute separate from the museum in Oslo in 1964. The universities in Tromsø and Trondheim followed *en suite* with their own chairs and departments.

At all Norwegian universities the discipline is now called "social anthropology", in the British way, and the research and education that is carried out has its ideals in a mixture of British and American anthropology.

French anthropology, known from Lévi-Strauss's "structuralism", has to some extent influenced Norwegian anthropology. Also, some young students have studied at French universities and come into contact with French Marxist anthropologists such as Maurice Godelier and Claude Meillassoux. Both lectured as guests at the Institute of Social Anthropology in Oslo in 1975.

The influence of German anthropology is little, but Norwegian social research is certainly not uninfluenced by German critical philosophy and method discussion.

Norwegian anthropologists have only to a very small degree had contact with social researchers from socialist countries in Eastern Europe, while our colleagues, the folk culture researchers, have had relatively good contact with research environments in Eastern Europe.

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This development of disciplines in Norway follows fairly closely the pattern of development in Sweden and Denmark. In Denmark, contact with the continental research traditions has been stronger since the war, and Danish anthropologists are perhaps somewhat more American than British in their culture anthropological outlook. In Finland, it is only in recent years that the separate chair in social anthropology has been set up; culture and social anthropological research is carried out by most of the Finnish folk culture researchers/ ethnologists.

There are two Scandinavian anthropological institutions – the Nordic Council for Anthropological Research and the Nordic Assembly of Ethnographers. The former organization is comprised of just professors and museum officials, but covers the field of anthropology in its widest sense. (The council was founded with grants from the Wenner-Gren Foundation.) Its members are folklorists, archaeologists, ethnologists, and social anthropologists. It can be said that, at the moment, the ethnologists dominate this Council and its symposia. Membership of the Nordic Assembly of Ethnographers, which meets every second year, is on the other hand limited to ethnologists/social anthropologists. Researchers and students can also take part however. The next meeting will be held in January 1977 in Finland, when the subject will be “Cultural Imperialism”.

Cooperation between Scandinavian institutes takes the form of exchange of degree dissertations and guest lectures. There is no common research project, but there is relatively frequent exchange of personnel between the countries.

In Norway we do not have our own journal, but *Ethos* in Sweden and *Folk* in Denmark both publish contributions from Norwegian researchers. Norwegian ethnologists otherwise present their works in the form of monographs, in museum periodicals, and in publications from the Institute of Comparative Culture Research. This institute is today primarily a fund for research on culture and society and not a research institute in the usual sense. For many years, the fund has financed the studies of the Norwegian farm as a socio-cultural unit, but this project is now being wound up and the fund's resources will be released for other new projects with more emphasis on non-European cultures.

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Since the Second World War, Norwegian anthropologists have done research not just in Europe, but in all corners of the world. Most schemes have been one man projects with prolonged fieldwork following the British pattern and concentrating on one or two societies or cultures. Even though Norwegians have spread themselves out over most of the world, it must be said, however, that there has been an inevitable concentration in the Middle East, Africa, South-East Asia, and Latin America. Concentration in the Middle East is mainly a result of Professor Fredrik Barth's comprehensive fieldwork in large areas of this region and also due to the follow-up work in the same area by his colleagues from Bergen.

Thematically, Norwegian anthropologists have covered a wide range. Some examples include Falkenberg's detailed kinship studies among the Murimbata people of Australia, which in theory builds on, and partly opposes, the classic works of Radcliffe-Brown. Professor Barth's studies of the relationship between ecological conditions, economy, and politics among Swat Pathans have awakened international attention, as have his studies of the ecological and economic adjustments of Nomad populations in large areas of the Middle East. A group of anthropologists from Bergen have worked with development problems in different

African countries and I myself have made a study of the social consequences of a couple of Norwegian aid projects among fishermen in India and in Sri Lanka.

In recent years, Norwegian ethnographic research has become involved with the everyday issues in three particular problem areas: (1) development countries; (2) minorities, especially as regards the Lapp population's political consciousness; and (3) immigrant workers. Two projects connected with this third theme have been begun by anthropologists from Bergen. They are doing fieldwork among immigrant workers in Norway and in their homeland, especially Turkey and Pakistan.

The latest tendency is for many students and fully qualified researchers to become interested in the different aspects of Norwegian society from a social anthropological point of view. We differ from ethnologists in that we emphasize contemporary studies, while they follow the historical method of approach. Furthermore, we differ from sociologists in that we do not just use hard data methods, but also intensified fieldwork with participant observation on a practicable cross section of Norwegian society, for example new housing areas, isolated island and country parish societies, production units, such as factories and ships, institutions etc.

On a theoretical level, it is primarily professor Barth who has awakened international attention with his work, and it is no exaggeration to say that today he leads the field of anthropology in Scandinavia. We, in Norway, believe that he has contributed to furthering the British "structural-functionalist" school, particularly in the footsteps of Raymond Firth and Edmund Leach, who were his teachers. His essays, "Models of Social Organization", published by the Royal Anthropological Institute in London, present what he calls a "generative process" analytical model for analyzing how social forms are created, maintained, and changed. Barth combines in these essays viewpoints from game theory, Erving Goffman's so called "dramaturgical model" of social life and perspectives from ecology and general system theory.

\*

The social anthropological study subjects consist of *basic subjects* (one year), *intermediate subjects* (with the possibility of individual curriculum choice six months in addition to the one year basic course) and *main subjects* (which presupposes that the thesis based on original material has been written). A major subject study, together with two supporting subjects, takes from six to eight years. At the moment, there are 220 registered students in Oslo, about 150 in Bergen and a lesser number in Tromsø and Trondheim. Up to now, anthropologists have only been able to get work in universities, museums, and other research institutes, but now the subject gives one the competence to teach geography and social studies in school.

Most students who take the main subjects examination in social anthropology choose the topic for their main thesis themselves, but of course in consultation with

the teacher. The students themselves are responsible for financing the collection of data, but there are funds to cover the costs of travel and accommodation in non-European areas. For ten years now, a Norwegian research council has put funds at the disposal of main subjects students who wish to collect material from non-European areas. This recruiting programme – still going on – is designed to strengthen the global perspective in Norwegian research and education. Social anthropologists have greatly benefited from this programme, so also have applicants from other social subjects. With the increase in the number of main subject students, and the increasing costs of studies in far removed areas, it will be necessary for more and more students to find their material in their own society. This, of course, will be contingent upon one finding one's own society just as interesting as the more exotic.

Here, as elsewhere in the world, young people are in opposition to their elders. Some students interpret my generation – wrongly in my opinion – as out-of-date positivists. These same students expect to find a more productive perspective from, among others, the young French Marxist anthropologists. There is no better way to increase the potential in the anthropological environment than by continuing to have productive exchanges of views on different methods of approach in our common interest. In other words, an understanding of what brings about culture and society variations and which forces drive this social development.

The increasing number of students in social anthropology, and in social studies generally, will in the future create great problems when it comes to actually getting work. At the same time as the student tally increases a stop has been put to the number of new jobs at the university in Oslo, and there are few jobs suitable for social anthropologists outside museums and research institutions. An important task is to show that social anthropologists can put their theories and methods to good use in our own society, and indeed be a valuable supplement to lawyers and economists, who almost have a monopoly on jobs in the Civil Service and privately owned industry.





EUROPEANIZATION / AMERICANIZATION  
OF THE ROMANIAN ETHNOLOGY /  
ANTHROPOLOGY AND HOW ITS EFFECTS  
ARE DEALT WITH

INTERVIEWER: LUCIA SUNDER-PLASSMANN<sup>1</sup>  
INTERVIEWED: GHEORGHÎĂ GEANĂ<sup>2</sup>



**Gheorghiță Geană**

**Interviewer's note:** "The present interview was conducted as part of my master thesis at the Institute of European Ethnology at the Humboldt University of Berlin on the topic *Europeanization of the Romanian Ethnology & Anthropology. An Analysis of the Current State of the Disciplines in the Eastern Margin of Europe*. The master thesis deals with the question whether there is an interrelation between the process of a (intensified) Europeanization of the Romanian Ethnology & Anthropology and current mutual relations between local ethnologists and anthropologists along with their positions on the project of Europe."



**Lucia Sunder-Plassmann**

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**Lucia**

**Sunder-  
Plassmann:**

**Could you say something about your scientific career /theoretical backgrounds (approaches/scholars) /thematic focal points?**

**Gheorghiță  
Geană:**

I studied philosophy at the University of Bucharest (graduated in 1965, PhD in 1977). Since 1967 I work (now as Senior Researcher) at the “Francisc I. Rainer” Institute of Anthropology of the Romanian Academy. After 1989 (before it was not possible because I had not been politically affiliated – simply said: I was not a member of the Communist Party) I was invited to teach anthropology at the University of Bucharest, at the faculties of Philosophy and Sociology. Since 2000 I am PhD supervisor at the Faculty of Philosophy, University of Bucharest. I am a member of the European Association of Social Anthropologists (EASA), Association for the Study of Ethnicity and Nationalism (ASEN, hosted by the London School of Economics), Fellow of the Royal Anthropological Institute (RAI) of Great Britain and Ireland, etc. Approached topics: microdemography, rituals, history of anthropology, epistemology of human sciences, anthropology of art, etc. My representative book (until now) is *Antropologia culturală. Un profil epistemologic* [Cultural Anthropology. An Epistemological Profile] (2005). I contributed also to several books and journals printed by Romanian and international publishing houses (among the latter it is worth mentioning Routledge, Cambridge University Press, Wiley, Südosteuropa-Gesellschaft, etc.).

**L. S.-P.:**

**What’s the particular within the Romanian discipline? What got lost? > e.g. French-influenced ethnology now covered by English-influenced one?**

**G. G.:**

Obviously, after 1989, the horizons of the Romanian practitioners in the domain were enlarged, especially to the West. When speaking about loss one must have in view the German influence, but this happened earlier, after the World War II. Indeed, some of the figures of ascendancy in Romanian ethnography and folklore (Simion Mehedinți, Sextil Pușcariu, Lucian Blaga, Dumitru Caracostea, Romulus Vuia, Gheorghe Vrabie) were trained under the German orientation.

As to the French influence, it continued to be active, especially in the decade '90. First of all I have in my mind the grant offered in 1991 by the Ministère de la Culture de France to 15 Romanian researchers for visiting the main ethnological centers in France. Also, some Romanian young researchers benefited from scholarships

to specialize in universities like Bordeaux and Grenoble. On the other hand, French scholars like Jean Cuisenier reiterated their interest in studying Romanian ethnographic reality. To be noted: other two centres where a few young Romanians went for specialization in ethnology/anthropology along the decades '90 & '00 were Neuchâtel (Musée d'Ethnographie & Institute of Ethnology – with Francophone orientation), and Halle (with Max Planck Institute of Social Anthropology – for British orientation).

It is not less true, nevertheless, that the British-American influence increased little by little, becoming principal as against other foreign trends.

**L. S.-P.:**       **How did the discipline change in the 1990s, 2000s and 2010s?**

**G. G.:**       The change was not fixed by such decennial landmarks. Certainly, 1990 (as the next year following the political revolutionary shift from December 1989) is associated to major changes. One of them was the *abolition of the censorship* related to the terms with religious and political meanings. I prefer, however, to mention the *liberty to use anthropological terminology*, first of all the opening toward the cultural anthropology. In Romania, cultural anthropology was institutionalized in 1964, as a section with this denomination in the framework of Centre of Anthropological Research (today “Francisc I. Rainer” Institute of Anthropology) of the Romanian Academy. This was possible because (as an institution of research) the Centre of Anthropological Research was affiliated to the biological section of Academy (today, it is affiliated to the section of medical sciences). Otherwise, within ideological circles, this (so to say) innovation was regarded – with suspicion! – as a western cosmopolitical event (i.e., as a kind of heresy). (About the institutionalization of social/cultural anthropology in Romania, see my interview – “An Adequate Illustration of Thomas Kuhn’s Theory about the Changing of Paradigm in Science” – in *Annuaire Roumain d’Anthropologie*, 51, 2014: 149–154; interviewer: Marin Constantin). Well, after 1989 this suspicion disappeared and the denomination of “social/cultural anthropology” was liberalized until being used by some ethnographers and sociologists without any sign of epistemological consciousness (see my chapter “Anthropology’s Long Journey to Professionalization. Some Problems with Cultural Anthropology in Romania”, in: Peter Skalník, ed., *A Post-Communist Millennium: The Struggles for Sociocultural Anthropology in Central and Eastern Europe*, pp. 99–113. Prague: Set Out.)

- L. S.-P.:** Which term do you use? > “post-soviet”, “post-socialist”, “post-communist”?  
Why?
- G. G.:** Personally I do not use such terms, because their first meaning is not scientific, but historical and political.
- L. S.-P.:** Is there a strong division between Ethnography/Ethnology/Anthropology? If so, is there a chance to overcome this division?
- G. G.:** This triadic distinction originates in Claude Lévi-Strauss (*Anthropologie structurale*, I, 1958). In his interpretation, the three terms do not designate three disciplines, but three levels of one and the same process of knowing. Thus, *ethnography* represents the empirical level, *ethnology* involves some generalizations, and *anthropology* is the general theoretical level. In my view, ethnology is the third wheel of the bicycle, *ethnography and anthropology covering completely* the tasks of anthropological knowing.
- L. S.-P.:** What / whereto is the orientation of the discipline? > applied methods, concepts, theories (geopolitically, people)
- G. G.:** A well-founded discipline (and anthropology *is* such a body of knowledge and applications) grows on behalf of all its strategic registers: empirical research, improving methods, theoretical elaborations, and applied engagements.
- L.S.-P.:** Do you cooperate with western Anthropologists? How is the relationship?
- G. G.:** I have had good relations with western anthropologists even from the beginning of my career in the discipline. This happened after 1968, when Romanian politics gained a relative independence as against Moscow and the communist bloc and opened its windows to the West. Consequently, as an epiphenomenon in the spiritual register of social life, a few anthropologists from USA (and also from... Norway!) came for fieldwork in Romania: the group of John Cole, and (independently) Katherine Verdery, Susan Linsey, Gail Kligman, Andreas Argyres, etc. In September 1974, Andreas Argyres (from the University of California, Davis) invited me to accompany him in the field, at Hitiaș, a village of Banat (western Romania). It was a chance for me, as a neophyte, to work side by side with a researcher from the American tradition in anthropology.

Long time, after he returned to USA, a reciprocal exchange of printed materials kept alive our relation. Even now, from time to time, we write to each other.

Today my relationships with American anthropologists (and social scientists) consist mainly in my correspondence for getting their articles and books, for publishing in their journals, or changing ideas.

**L. S.-P.:** **Is there an entanglement of political (Europeanization) programmes with the anthropological orientation?**

**G. G.:** I have no argument to sustain this hypothesis. (Nevertheless, a risk does exist. For example, if the civic rule of protecting the personal data will be dogmatically applied to the researcher's interactions in the field, then the idea itself of the scientific research as a spontaneous, normal, and revelatory activity will be struck in its core!...)

**L. S.-P.:** **Is the Erasmus exchange program often used for permanent migration? > loss of qualified scholars?**

**G. G.:** By comparison with practitioners from other domains (like medicine, or music), the ethnographers who migrated from Romania for going in West are very few. Paul Petrescu, Ion Taloş, or Anca Giurchescu (an ethno-choreographer who followed her husband – a stage director – in Denmark) are among them. However, all three (and similarly others) left Romania before 1989. Otherwise, my own students and doctoral candidates used Erasmus grants to enlarge their geo-cultural horizons, but the great majority of them returned to their native country (as for the rest, usually they keep in touch with the people at home).

**L. S.-P.:** **Situation about grants: Is it hard to get one? Who is the sponsor? > Soros, Wenner-Gren Foundation, EU?**

**G. G.:** About 25–30 years ago I was invited to attend two international projects of research: one with a British team, and the other within a more complex team (with Spanish and German researchers). I do not remember the sponsor; however, I hesitated because the themes were alien enough from my preferences. As a matter of facts, in the last 25 years I dedicated myself to the historical problems of anthropology, as well as to the epistemological interpretation of anthropological data.

In Romania, the academic research was consistently financed in the years '50–'60 from inner budgetary funds; bureaucracy was not so branched out. Perhaps I am conservative, but it is just in those years that the activity of the Institute where I work was most productive. Certainly, today, my younger colleagues – more dynamic than me – resort currently to local sponsors, and equally to Wenner-Gren Foundation or EU.

**L. S.-P.:** **Is there any financial aid for publications? In which language(s) do you publish?**

**G. G.:** Usually, the institutional funds for publications are strongly limited. As a consequence, the expenses for printings are covered by grants, but recently I have published a book along with a colleague of mine at Editura Academiei Române (the Publishing House of the Romanian Academy) and although Academy is the highest intellectual forum in Romania, all the expenses were supported by me and my colleague, as authors.

Regarding the journals: before 1989, the Institute of Anthropology had under its authority two journals: *Annuaire Roumain d'Anthropologie* (with French titles, but with content in English, too) and *Studii și Cercetări de Antropologie* (Anthropological Researches and Studies). Today, while the *Annuaire* is still assumed by the Editura Academiei, *Studii și Cercetări* became an online journal in English and is supported mainly by the financial diplomacy of the editorial board. As to my publications: excepting Romanian language, I have published until now (abroad) mostly in English (14 articles + 2 in print), and also in German (1 article), and Spanish (1 article). Recently, I have been also invited to publish 2 (two) articles in French. (In the category of “articles” I have included also the chapters in books – 4 in English and 1 in German.)

**L. S.-P.:** **Does the EASA extension to Eastern Europe stand in competition with the Americanization of the discipline?**

**G. G.:** So it seems. In 1989, a group of leading western anthropologists headed by Professor Adam Kuper decided to found a new association. They added the letter E in front of ASA (which is the sigla of the professional association of British anthropologists) and obtained the denomination EASA, that is: European Association of Social Anthropologists. In an informal report about the discussions that preceded the founding of EASA, Professor Kuper mentioned subtly: “People felt a need for closer co-operation in teaching and

research, and for a professional body to represent social anthropologists in Europe. There is still, clearly, *a distinctive European tradition in social anthropology*” (*EASA Newsletter*, 1, 1989: 2 – my italics, G.G.). What could be the referential target of the attribute “distinctive” if not the American anthropology?

In any case, the founding of EASA was a happy idea. While the IUAES as an international association is too large and leaves room to amateurism, EASA is very precise in its goals and proves to be truly efficient in the tentative to unify anthropological energies on the European continent (and not only!). Networks on various specializations – history of the European anthropology, the group of medical studies, etc. – animate the activity within the Association, and as a whole this organizes general conferences every two years.

- L. S.-P.:** **Is the Americanization of the discipline an exception in South-East Europe?**  
**Is Katherine Verdery still active in Romania? How is thought about her?**  
**Is the Anthropological project (still) a western one?**

- G. G.:** In Romania, the non-biological anthropology appeared in competition with the vernacular biological paradigm of the discipline. Consequently, we were indebted to neither American nor British tradition. That is why even from the beginning of the institutionalization, in 1964 (see above), we used for the discipline a combined denomination: “social *and* cultural anthropology”. (Personally, I prefer to say “cultural anthropology” as being more simply and, also, for avoiding the hybrid formula “socio-cultural”. More than these formal arguments, anthropology is not a branch of sociology – as A. R. Radcliffe-Brown asserted in his exchange of retorts with G. P. Murdock –, but a discipline in itself, the main concept of which is “culture”.
- As to Katherine Verdery, I do not see her as very influential over the Romanian anthropology, excepting a few younger persons who got their doctor degree under her supervision, in USA. Particularly, I think that she committed a few mistakes in her attitude toward the Romanian milieu. For example, she put in front of her book *Transylvanian Villagers* (1983) two malicious mottos; here is the shortest of them:

*“What do you get if you put three Magyars together?”*  
*– An insurrection.*

*What if you put three Saxons together?*  
 – *A business enterprise.*  
*And if you put three Romanians together?*  
 – *A band of thieves.*  
 – Story told by villagers in 1980”

Obviously, a researcher in the field must not flatter the natives’ “*amour propre*”, but equally the code of professional ethics (and both British and American anthropologists do have such a code) does not allow him/her to humiliate the people under study. (Particularly, I have studied Romanian proverbs and folk sayings and can affirm that some of them have an absolute value, but others have relative meanings. *Romanians have a refined sense of self-irony*; sometimes a correct understanding of a saying supposes to take just its inverted meaning.) Briefly, in my opinion, those mottos (and this is not the single malicious aspect of her behaviour) went beyond the principles of professional ethics.

Naturally, I appreciate Ms. Verdery’s professionalism in itself, especially the talent of making use of participant observation and the courage to approach some delicate aspects of the social and political life in a country governed by a socialist totalitarian regime. Her recent book, *My Life as a Spy*, has been translated in Romanian and has favourable reviews in literary journals. She was also awarded the title of *doctor honoris causa* at the universities of Cluj and Bucharest.

**L. S.-P.:**      **How is your relation to / image of Europe?**  
**Do you feel as “European” or of not moving well enough?**  
**Which new boundaries are opened through the Europeanization process?**

**G. G.:**        Since the 19th century, Romanians aspired continuously to modernity; that is why they looked with fervour toward the Occident. Unfortunately, the historical events were hostile to them, so that they were confronted to what Mircea Eliade called the “terror of history”. The fall down of the “iron curtain” opened the way to the desired synchronization, but the process advances slowly – and perhaps it is not so much the economical difference as the diversity in the value systems of the component nations that explains the delay.

As regards me, although I did not travel abroad before 1989, I always felt myself to be a European by orienting myself toward the literature, music, and arts on the continent. Also, I endeavoured to assume as much as possible the essential core of bibliography in



the domain of anthropology. Then, once the providential historical shift occurred, I might travel abroad for attending scientific meetings (*inter alia*, I attended all the EASA biennial conferences until now – the most recent one, the 15th, took place in August this year [2018 – publisher’s note], at Stockholm); this meant for me a tremendous chance to establish face-to-face relationships with colleagues from other countries, and from practical point of view I could publish in prestigious books and journals.

**L. S.-P.:** **Are there postcolonial/decentering countermovements within the Romanian discipline? > Is it possible to speak out (status/ressources)? Are you heard? > Are there (national/transnational) decolonial networks/activism? Dialogues between East and South (e.g. with Latin America)? Dialogues between emigrated scholars and those who remained? > With what movements do you solidarize?**

**G. G.:** There are, indeed, a few tentative to consider anthropology as a (neo)colonial science. In my viewpoint, while accepting the existence of a colonial period in history, I am doubtful regarding the adequacy of the term “colonialism” – with its derivative “neocolonialism” – when speaking about anthropology. Generally, these terms have pejorative meanings. If so, we must avoid to mingle the science and politics. Science – in our case: anthropology – is an enterprise governed by the impetus of ideas; in spite of some unforeseeable effects, its *primordial* essence consists in the noble process of knowing. It is true that anthropology developed for a long time on behalf of the so called “primitive” people and, often, before becoming a “participant” fieldworker, the anthropologist in the field was hosted at the residence of the colonial administration. Nevertheless, the scientist as such was not involved in any action related to the colonialist rule. It is emblematic in this respect Malinowski’s advice: “Get off the verandah!” – go in the middle of the people! – That is all and no more (see my answer to the following question)!

**L. S.-P.:** **What’s your handling strategies with the new changes through the EU disciplining system and the marginalized position within Europe /within Anthropology? How do you position yourself?**

**G. G.:** It is to be noted that EASA does not exert any control over the national anthropologies. It only facilitates contacts among the anthropologists of different countries.

In these circumstances, I do not feel myself marginal. My problem is that I am not dynamic enough to accept all the received invitations to lecture, to attend conferences, etc. A few years ago, a compatriot of mine invited me to become a member of a European commission in Brussels the function of which was to judge the research projects submitted to be financed by the European Union. I appreciated the chance, but I declined it because, generally, I am reluctant to the bureaucratic activities, even at the highest level.

**L. S.-P.:**        **How do you position on nationalist currents within the discipline?**

**G. G.:**        Anthropology is a comparative science of the cultures in the world. The phenomenon of globalization affects the national values, but it is not in an irreconcilable relation to ethnic aspects of the social life. Essentially, globalization is irrepressible in the sphere of material life (technology, economic affairs) and, in its turn, ethnicity is resistant on behalf of spiritual manifestations (language, art, etc.) – see: Gheorghiță Geană, “Ethnicity and Globalisation: Outline of a Complementarist Conceptualisation”, in *Social Anthropology* [the journal of EASA], 1997, 5 (2): 197–209. Thus, I think that the small nations must respect own values. And if not acceptable to be “the third wheel of the bicycle”, ethnology could assume this task – of studying and protecting the national values – as a kind of local anthropology.

In short, I find the “*nationalist currents*” in anthropology to be *natural trends*. In this case, the nationalists must not be seen as demonic persons – there is for these latter the term “chauvinists”; in John Hutchinson’s terms (“Moral Innovators and the Politics of Regeneration: The Distinctive Role of Cultural Nationalists in Nation-Building”, in: *International Journal of Comparative Sociology*, Vol. 33, Nos 1–2, 1992, pp. 101–117), the nationalists are “moral innovators in the service of nation”. In the XIXth century, a leading figure of Romanian intellectual life, Titu Maiorescu (a literary critic and professor of philosophy, after getting PhD from the University of Gießen), fixed the status of the Romanian creative intelligentsia in these words: “We are Romanians looking at universality”! This could be also an ideal formula for the Romanian anthropologists of today!...

(Submitted for publication on 15 June 2020)

IN MEMORIAM



ELENA RADU  
(1938–2019)

*« Portons des blessures – sources – ouvertes  
sous vêtements.  
Grandissons l’infini d’une chanson, d’un  
mystère. »*  
(Lucian Blaga, « *Chanteurs malades* »  
volume « *Au choix des eaux* », 1933)

Elena Radu est née au village de Mihăileni, département de Suceava, dans la belle contrée de Bucovine, au nord de Roumanie, le 11 mars 1938. Entre 1959–1964, elle est étudiante à la Faculté de biologie de l’Université « Alexandru Ioan Cuza » de Jassy, une importante ville historique et culturelle de la Moldavie et de la Roumanie. Ici, l’anthropologie était une discipline universitaire (le seul cas de pays dans ce période-là) conduite par l’éminent professeur Olga Necrasov, membre correspondante de l’Académie Roumaine et le prochain directeur du Centre de

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Recherches Anthropologie, entre 1964–1974. À la fin des études universitaires, Elena Radu réussit par concours, en décembre 1964, au Centre de Recherches Anthropologique de Bucarest et commence sa carrière de recherches en anthropologie physique à laquelle elle se dédiera pour toute la vie.

En caractérisant l'activité de recherche et son importante contribution au développement de l'anthropologie roumaine on peut synthétiser au moins trois thèmes majeurs sur lesquels Elena Radu a déposé le plus haut effort, sa passion, son talent : la structure anthropologique des populations, l'anthropologie ergonomique et l'anthropologie médicale.

Pendant les premières deux années, 1965–1966 elle est membre de l'équipe de Dr. Maria Cristescu dans la recherches de l'âge chronologique et physiologiques des filles et de l'équipe du professeur Vasile Caramelea dans la recherches des aspects psychosociales et morpho-physiologiques du milieu industriel de Câmpulung-Muscel, département d'Argeș. En suivant les traditions de l'anthropologie roumaine, les chercheurs du Centre travaillaient dans plusieurs domaines et thèmes de l'anthropologie. Entre 1965–1972 se déroule la grande enquête anthropologique de la recherche du Couloir Bran, département Brașov. Elena Radu s'occupe principalement de collecter des données concernant la variabilité des caractères somatiques et de ceux morpho-physionomiques de la région orbitale et de l'œil pour les expertises de recherche en paternité dans les villages Șimon, Moeciu de jos, Fundata, Șirnea, Sohodol, Măgura, Peștera. Elle continue aussi les recherches concernant la corrélation entre la structure anthropologique et le milieu industriel, spécialement entre la variabilité somatique, les types constitutionnels (selon la classification L. Brian) et les différents secteurs de travail à l'Usine « Tractorul Brașov ». En 1973 avec le collectif conduit par dr. Suzana Grințescu-Pop et Th. Enăchescu publie « Contributions à la prospection d'ergonomie anthropométrique de la Roumanie ». Elena Radu développe ses études sur l'adaptation sélective aux conditions du travail et fait des recherches très complexes et élargies au Banat de sud-est, des recherches qui constitueront la base de sa future thèse de doctorat. Entre 1973–1976 elle étudie la structure anthropologique des Allemandes (les *sași*) de Hălchiu, Brașov et les Hongrois (les *secui*) de Lueta, Harghita.

Le 17 décembre 1977, à l'Université « Al. I. Cuza » de Jassy, sous la coordination de professeur dr. Doc. Olga Necrasov, Elena Radu soutient la thèse de doctorat « L'Anthropologie de la population roumaine de Banat de sud-est ». La thèse c'est un travail ample et très riche en informations, conçu sur la ligne des recherches intensives et extensives du Centre et puis du Laboratoire d'Anthropologie de l'Institut « Victor Babeș » de Bucarest (c'était la période de la rétrogradation institutionnelle de l'anthropologie roumaine) en conformité au projet du Centre concernant un *Atlas anthropologique de la Roumanie* (auteurs: Olga Necrasov, Suzana Grințescu-Pop, Th. Enăchescu, Maria Cristescu, etc.). Les populations étudiées étaient situées au sud-est de l'ancienne province historique de Banat, dans une zone pittoresque prédominante montagneuse avec une réseau hydrographique riche

appartenant au bassin du Danube, dans les Couloirs Cerna, Timiș, Vallée de Bârzava et la Vallée de Nera, des populations traditionnelles pastorales – agraires trouvées sous l'influence du processus d'industrialisation et d'urbanisation en force de ces jours-là. La thèse est structurée en deux parties : 1. La structure anthropologique des populations de milieu rural du Banat de sud-est ; 2. Recherches d'anthropologie ergonomique au Combinat sidérurgique Reșița, un important centre industriel de Roumanie d'une vieille tradition de Banat. Les recherches concernant la structure anthropologique des neuf communautés rurales sur centaines de sujets autochtones, hommes et femmes de 20–55 ans, ont visé 10 dimensions céphalo-faciales, 7 dimensions somatiques, les indices de conformation, la pigmentation de l'iris et des cheveux, les systèmes OAB et Rh(D). L'analyse des résultats fait une comparaison entre les communautés et mets en évidence les différences et les ressemblances. En ce qui concerne les recherches de Reșița, celles-ci se réfèrent à la structure anthropologique des ouvriers du Combinat de trois secteurs de travail, haut fourneau, aciérie et laminoir, en suivant la différenciation anthropométrique selon la nature du travail et du microclimat. On fait aussi une comparaison entre les ouvriers en agriculture et ceux de l'industrie. Les résultats illustrent chez les ouvriers en industrie même ceux provenus du rural une macro-somatisation faciale en hauteur et en largeur et en stature – assise, tandis qu'aux ouvriers du rural une augmentation du diamètre bicrêtal. Elena Radu a défini la cause des différences par un « phénomène de sélection par non-adaptation ». C'est une thèse complexe qui peut toujours servir de références en anthropologie. Après une recherche de biotypologie et d'anthropologie ergonomique au nord-est de Moldavie, entre 1980–1982, auprès d'autres activités, se penche sur l'étude des populations de Dobroudja.

Infatigable et très active, Elena Radu continue avec une équipe nombreuse et valeureuse les recherches anthropologiques dans les plus importants centres urbains et industriels des grandes provinces historiques de la Roumanie sur mille sujets de deux sexes: Bucarest, Botoșani, Suceava, Bacău, Galați, Pitești, Câmpulung, Constanța, Timișoara, Reșița, Turnu-Severin, Cluj, Hunedoara, Deva, Brașov etc. Les résultats compris en deux travaux ont été publiés en 1984 et 1985 en l'*Annuaire Roumain d'Anthropologie* et soulignent la concordance « entre la fonction sociale et le potentiel biologique de la population » et le fait que les différences de la structure anthropologique entre les catégories socio-professionnelles sont dues « à la sélection biologique et sociale marquée par un fort déterminisme génétique ». Les données obtenues seront comparées avec celles du contrat de recherche « Callist » (2004), un contrat d'anthropologie appliquée pour des vêtements de protection dont les recherches ont été réalisées dans cinq centres y retrouvées. Hors de contrat, l'étude a poursuivi aussi les aspects d'une microévolution concernant les caractères dimensionnels et de conformation, spécialement l'évolution de l'indice de masse corporelle (IMC, ou BMI) selon le sexe, l'âge et la zone géographique. Elle étudiera aussi, des aspects des modifications diachroniques sur les jeunes recrues, pendant les recherches sur les adolescents.

Après les amples recherches sur la population urbaine, Elena Radu commence, avec une équipe plus réduite mais spécialisée (Camelia Șandru, Ecaterina Morar, Brândușa Orășanu, Luminița Ciotaru, etc.) des études d'anthropologie médicale concernant des aspects divers d'impérieuse actualité : difficultés bio-psycho-sociales d'adaptation ou de non-adaptation aux conditions de vie et de travail modernes, des troubles neuropsychiques, psychosomatiques, vulnérabilité neuropsychique pendant les crises existentielles et sociales, l'adolescence comme « état de crise », « conflit de développement », la santé nutritionnelle des adolescents etc. Sur la même ligne mais avec une plus grande intensité et obstination, suivant les recommandations d'OMS, Elena Radu embrasse le problème du surpoids et de l'obésité dans la population roumaine et abandonne l'indice anthropologique de plénitude corporelle Rohrer (qui voit tridimensionnel la corpulence : poids/taille<sup>3</sup>) en faveur de l'indice de masse corporelle ou Quetelet (IMC = poids/taille<sup>2</sup>, bidimensionnel). Elle consacre un chapitre spécial à la corpulence de la population de Roumanie apprécié par IMC dans l'*Atlas anthropologique de la Roumanie* (volume I). En plus, au même Atlas, elle substitue l'indice Rohrer, utilisé au cours de décennies à la caractérisation de la structure anthropologique des populations chez nous et ailleurs, par l'indice Quetelet, étant nécessaire un travail difficile concernant le volume énorme de sujets de deux sexes des populations roumaines étudiées.

Après 1989, les anthropologistes roumains de Bucarest et Jassy commencent les préparations pour la publication des résultats des recherches concernant les principales provinces historiques. Tous les *Atlas* ont paru entre 1999–2012 sous l'égide de la Maison d'Édition de l'Académie Roumaine de Bucarest.

En 2004, Elena Radu signe avec Horst Schmidt, comme auteurs et Cristiana Glavce co-auteur, l'*Atlas Anthropologique du Banat du Sud*. En 2006, Elena Radu et Cristiana Glavce, auteurs, publient l'*Atlas Anthropologique de la Transylvanie* (volume II). En qualité de coordinatrice, Elena Radu publie l'*Atlas Anthropologique de la Moldavie*, en 2008 et l'*Atlas Anthropologique de la Dobroudja*, en 2010. Et la liste culmine avec l'*Atlas Anthropologique de la Roumanie* (volume I) en 2011, apprécié avec le Prix de l'Académie Roumaine. Le rêve du Professeur Olga Necrasov et d'autres anthropologues roumains s'était accompli. Il faut souligner que Dr. Elena Radu, avec une force et une résistance physique et spirituelle extraordinaire, a eu vraiment le rôle principal dans l'élaboration de ces Atlas. Il est regrettable qu'à la fin d'une telle réussite Dr. Elena Radu a été mise en retraite au moment où l'anthropologie biomédicale et l'anthropologie roumaine, en général, allait à traverser une période de « crise d'identité » et il était besoin de telles personnalités.

Dr. Elena Radu a démontré au cours des années non seulement sa personnalité scientifique mais aussi les qualités d'un bon organisateur des recherches complexes de terrain. Elle a été aussi un bon chef de Laboratoire entre 1982–1983. Mais un aspect qu'il faut souligner et ne peut pas qu'on oublie concerne la direction des revues de l'institut, *Studii și Cercetări de Antropologie* (Études et Recherches

d'Anthropologie) et *Annuaire Roumain d'Anthropologie*. Elena Radu a soigné l'apparition annuelle des revues en qualité de secrétaire ou rédacteur en chef : entre 1966–1998 les *Études* et entre 1977–2009 l'*Annuaire*. Elle a activé aussi, avec une implication sérieuse, dans le Conseil Scientifique de l'institut.

L'anthropologie a été sa vie, son univers de vivre en totalité ; comme elle disait, l'institut était « sa seule maison ». Une personnalité verticale et forte, complexe et compliquée, contradictoire en soi et en dehors, Elena Radu avait une fragilité, une douloureuse sensibilité et perception de soi et des autres et, pour la contrecarrer, s'affichait comme une femme assez sévère et rigide. Peu de personnes parmi ses collègues et amis ont vu la réelle Elena Radu. Après la mise en retrait, elle s'est isolée et lentement une maladie infâme l'a tué pendant la nuit de 10–11 juin 2019.

Dr. Elena Radu reste pour nous une grande personnalité et un véritable pilier de l'anthropologie roumaine, en marquant avec sa présence un demi-siècle d'anthropologie roumaine.

*« Il y a des heures où tout me surprend, des heures où les choses les plus simples me donnent le frisson du mystère. Ainsi, il me paraît, en ce moment, que la mémoire est une faculté merveilleuse et que le don de faire apparaître le passé est aussi étonnant et bien meilleur que le don de voir l'avenir. »* (Anatole France, *Dédicace*)

**Eleonora Luca**







VINTILĂ M. MIHĂILESCU  
(1951–2020)

*« Je cherche, ne sais pas que je cherche. Je  
cherche des aurores qu'ont été, jaillissantes,  
flambantes fontaines – aujourd'hui des eaux  
enchantées et vaincues. »*

(Lucian Blaga, *La lumière d'hier*, vol. *Au choix  
des eaux*, 1933)

Vintilă Miron Mihăilescu a été certainement une personnalité marquante de l'anthropologie roumaine. Par la recherche, l'activité didactique et les travaux publiés, il s'inscrit parmi les piliers de l'anthropologie roumaine qui ont enrichi la thématique et la méthodologie de recherche tant par la conservation des traditions de l'école roumaine que par des nouvelles et modernes directions de recherche, préoccupé en même temps de l'avenir de l'anthropologie roumaine se préoccupant pour ses continuateurs. Provenu d'une famille dédiée aux sciences médicales roumaines,

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ANN. ROUM. ANTHROPOL., 57, P. 151–157, BUCHAREST, 2020

praticiens et professeurs universitaires et un grand-père anthropologue géographe et membre de l'Académie Roumaine, il a eu, grâce à une telle ascendance et à son esprit vif de chercher le monde, toutes les auspices d'accomplir ses idéals dans la science roumaine, en particulier, dans l'anthropologie culturelle.

C'est assez difficile de présenter la biographie scientifique de Vintilă Mihăilescu. La première motivation d'écrire sur l'activité et l'œuvre scientifique de Mihăilescu est celle-là qu'il a travaillé dans le Laboratoire et le Centre d'Anthropologie « Francisc I. Rainer » plus de vingt années en dépit de la malveillance de quelques-uns ; la deuxième c'est que moi-même j'ai fait part de ses équipes de recherche à Rovinari, Novaci et Mărgimea Sibiului. C'est la raison qui m'a déterminé d'écrire aussi parce que la période 1981–1990 a été pour moi, avec Theodor Enăchescu et Vintilă Mihăilescu, une période très active, émouvante et féconde de consolidation de mon statut d'anthropologue. Selon mes connaissances, le sommaire de la présentation de l'activité et de la contribution de Mihăilescu au développement de l'anthropologie roumaine suivra les événements suivant la chronologique.

Entre 1970–1974, V. Mihăilescu a poursuivi les études universitaires de la Faculté de Psychologie de l'Université de Bucarest. Peu de temps après il a activé à l'Institut de Gérontologie « Ana Aslan » de Bucarest et avant 1980 il commence vraiment sa carrière en recherche anthropologique dans le Laboratoire d'Anthropologie de l'Institut « Victor Babeș » de Bucarest. (C'était la période quand l'anthropologie roumaine souffrait des rétrogradations institutionnelles.) À son début il étudie le jeu des enfants, les relations parents/enfants et l'évolution et la signification du processus de décentrement interpersonnel. En suivant le spécifique de la recherche anthropologique et sous l'influence du contexte roumain socio-politique caractéristique – urbanisation et industrialisation en force, Vintilă Mihăilescu se dirige vers l'étude de la population, d'après lui, « la population – comme une réalité humaine autonome et un niveau spécifique d'analyse... ». Ainsi il commence une ample et prodigieuse recherche qui restera une œuvre de référence en anthropologie : l'étude de la population du département Gorj de l'Olténie. En même temps il devient le plus jeune coordinateur des projets du Laboratoire. Les deux grands thèmes qu'il qu'a conçus et qu'a conduits entre 1980–1990 se réfèrent à la recherche anthropologique complexe de la population d'une ville bivalente industrielle-agraire, Rovinari et des deux sous-populations (l'une autochtone – « *Pământeni* » et l'autre, immigrée il y a deux-trois siècles – « *Ungureni* ») de Novaci. Parallèlement, le thème concernant le centre minier Rovinari a constitué aussi, partiellement, l'objet d'un contrat avec le Combinat Minier Rovinari et l'unité administrative locale, contrat qui a représenté aussi un aide financière pour l'institut. C'est aussi le moment qui ouvre la voie didactique et pédagogique de Vintilă Mihăilescu, par la sélection d'une équipe professionnelle et passionnée et par l'attraction des étudiants et aussi par l'émulation créée pendant les réunions scientifiques et les enquêtes de collection des données.

En ce qui concerne les recherches de Rovinari, celles-ci ont été développées selon les particularités administratives – territoriales et les caractéristiques des

habitants sur les aspects démographiques, socio-économiques et culturels. Le thème s'intitulait « *Conditions socio-économiques d'organisation de la vie au Centre industriel – agraire Rovinari, département de Gorj – Olténie* ». Ces jours-là le centre Rovinari représentait un « expériment », étant, par ses habitants, un mélange des mentalités, valeurs, habitudes, besoins entre les éléments rural – agraire et urbain – industriel. Pour trouver des solutions concernant la coadaptation, la recherche a été déroulée sur quatre niveaux d'analyse : la population, l'activité, l'habitat et l'administration du centre. Le centre Rovinari était composé par la ville Rovinari et quelques communes voisines. L'âge moyen de la population de Rovinari étant 19,74 ans, on parle d'une population extrêmement jeune. Un pourcentage de 60% des habitants proviennent des villages d'autres départements : Botoșani, Vaslui, Vrancea, Bacău, Prahova, Teleorman, Hunedoara, Vâlcea, Olt, Dolj, Mehedinți. La majorité des familles sont de type nucléaire ou consensuel et beaucoup d'enfants sont illégitimes. Les ouvriers qualifiés prédominent et les intellectuels sont moins de 5%. La caractéristique de la population active est la mobilité concernant le lieu de travail mais aussi le changement des plusieurs qualifications. L'objectif de la méthodologie utilisée a poursuivi l'interdépendance et les isomorphismes entre les caractéristiques fonctionnelles et de structure psycho-individuelle (schéma d'action) et les caractéristiques fonctionnelles et d'organisation sociale (schéma d'interaction). On a appliqué des questionnaires très élaborés et diversifiés et des tests d'estimation du style cognitif, du profil affectif – émotionnel, de la tension familiale et sociale etc. Pour ces temps-là un tel thème et aussi la mise en pratique de la recherche et l'interprétation des résultats constituait un acte courageux, mais l'équipe de recherche conduite de Vintilă Mihăilescu a dépassé toutes les difficultés techniques et socio-politiques.

L'histoire des recherches concernant la population de Novaci commence plus tôt que celle de Rovinari, Vintilă Mihăilescu en faisant quelques comparaisons entre les deux populations du département Gorj de l'Olténie. Au début de la recherche de Novaci, V. Mihăilescu est surpris par la signification et la compréhension de la différence entre les deux sous-populations : d'un côté les autochtones, agriculteurs – les « *Pământenii* » et de l'autre côté les immigrés, bergers de Mărginimea Sibiului, Transylvanie – les « *Ungureni* ». On parle de deux sous-populations de même langue et de même culture qui cohabitent depuis deux-trois siècles, très peu mélangées. La réalité de l'opposition pour tous les niveaux et ce polarité le porte à la multiplication et diversifications des investigations d'une perspective psychologique, sociologique et biologique, autrement dite, à une véritable perspective anthropologique. Et parce que nous étions, ces jours-là, un Laboratoire de l'Institut « V. Babeș », un institut de recherches médicales, le thème de recherche de V. Mihăilescu s'intitulait : « *État de santé et environnement – recherches complexes biomédicales et socio-culturelles concernant les facteurs génétiques, constitutionnels, psychologiques, démographiques et socio-culturels impliqués dans le déterminisme de l'état de santé* ». Vintilă Mihăilescu a formé une

équipe large en réunissant des chercheurs du Laboratoire et de l'extérieur de divers domaines : médecine, biologie, psychologie, sociologie, philologie, ethnologie, philosophie, physique, mathématique, économie etc. La différence entre les deux sous-populations de Novaci imposait l'idée d'une typologie. Un modèle au début de la recherche a été la spécialisation fonctionnelle des hémisphères cérébrales auquel s'ajoute « la dynamique de type contradictoire » après Silviu Lupașcu, mise en évidence par la physique quantique. La recherche multidisciplinaire de Novaci a eu à la base non seulement la pensée intuitive et créative de Mihăilescu mais aussi une riche bibliographie correspondante aux exigences scientifiques et, aussi, une large batterie de testes et questionnaires. Pour Vintilă Mihăilescu, le modèle typologique élaboré au cours de la recherche se basait sur quelques principes : le principe de mise en relations, le principe de l'antagonisme activité – réactivité, le principe du déséquilibre typologique, le principe du réglage antagonique entre les niveaux de mise en relations. Les niveaux dont on parle peuvent être directe/médiat, concret/abstract, extraversion/introversion, égocentrisme/socio-centrisme, rapidité/ lenteur, volontaire/involontaire, cyclothymie/schizothymie, excentricité/concentricité, dépendance/ indépendance de champ etc. Concernant la latéralisation fonctionnelle des hémisphères cérébraux, on sait que le gauche est spécialisé en relations médiates et le droit en relations directes. Les résultats confirmeront une différenciation typologique selon tous les niveaux considérés.

En 1986 nous avons participé ensemble à la troisième Conférence nationale d'écologie d'Arad, avec le travail (un poster) « L'écologie de la différenciation biotypologique des populations humaines » (publié en 1988) où Vintilă Mihăilescu présente un schéma typologique original et la différenciation biomédicale et psychologique polaire déterminée aussi par le « pool » génétique et partiellement par suite des pressions socio-écologiques qui agissent sur les deux écosystèmes. Mon devoir a été la recherche des types constitutionnels des « Pământenii » et « Ungureni » selon la classification de Kretschmer (les autochtones se caractérisent prédominant comme pycnique et les immigrés comme leptosomes).

Pour consolider les résultats, Vintilă Mihăilescu a complété la recherche de Novaci avec une recherche de la population de Mărginimea Sibiului, d'où les *Ungureni* sont partis pendant les siècles XVIII–XIX, en tant que bergers, avec leurs familles, et ont formé la sous-population de Novaci. L'enquête anthropologique s'est déroulée selon la même méthodologie élaborée pour Novaci. Dans le manuscrit sur les travaux scientifiques en résumé envoyés à Jassy pour le Symposium « Les jours académiques de Jassy », Vintilă Mihăilescu écrivait en conclusion concernant les *Pământenii* et les *Ungureni* de Novaci: « Les résultats obtenus suggèrent l'appartenance – avec des notes particulières et caractéristiques – de celles deux populations aux deux types psychologiques distinctes. Celles-ci s'encadrent dans une dynamique typologique générale-humaine qui réside en l'antagonisme fonctionnel entre « primarité » et « secondarité »... Ainsi se réalise un réglage antagonique de l'ouverture et fermeture relationnelles. ».

Mémorables sont : le Symposium « *Contexte socio-culturel et typologie humaine* » qui a eu lieu en octobre 1989 à Baia de Fier, Gorj et aussi le Symposium « *Sens 1989* » (en roumain « Rost 1989 ») en décembre 1989 à Bucarest, où on a présenté les résultats des deux grandes recherches, de Rovinari et Novaci.

C'était le moment crucial pour notre pays, vers la fin du décembre ayant lieu les événements que nous les appellerons « la révolution roumaine » qui a aboli la dictature communiste. Le Laboratoire est redevenu en 1990 le Centre d'Anthropologie « Francisc I. Rainer » sous l'égide de l'Académie Roumaine. Le Professeur dr. Doc. Victor Săhleanu est revenu à la direction du Centre et Vintilă Mihăilescu a été élu secrétaire scientifique pour une courte période. La liberté ressentie après 1989 par nous tous a ouvert beaucoup de voies pour la recherche anthropologique roumaine.

En 1990, Vintilă Mihăilescu est l'initiateur de l'organisation de la Société d'Anthropologie Culturel de Roumanie (SACRE) et entre 1994–2000 est le président de celle-ci.

Dès 1992 il devient collaborateur à l'hebdomadaire « Dilema veche » (Le vieil dilemme) avec la rubrique « Socio – haihui » (Socio – ailleurs). Ironie du sort, le périodique cesse l'apparition pendant le printemps 2020 en même temps avec la disparition de Vintilă Mihăilescu !

En 1993 il obtient le titre de Docteur en psychologie, en soutenant à l'Université Bucarest la thèse « *Ungureni et pământeni. Une analyse ethno-psychologique* », thèse qui couronne une recherche scientifique de haut niveau. Une transposition littéraire et en même temps scientifique des recherches c'est le livre « *Fascinația diferenței* » (Fascination de la différence), apparu en deux éditions, en 1997 et 1999.

Après 1989, Vintilă Mihăilescu a activé dans le Centre d'Anthropologie encore approximativement dix années, d'abord comme titulaire et puis avec demi – norme jusqu'en 2000. Manqués comme nous sommes de l'archive de notre Institut (après 2016 nous avons déménagé temporairement dans la Maison de l'Académie Roumaine et l'archive se trouve dans un dépôt peu accessible), il est difficile de préciser le moment où Vintilă Mihăilescu est parti définitivement. Mais on peut dire que, en dépit de ses opposants du Centre, il a dé passé toujours plein d'élégance, compréhension et sans rancune où les obstacles. Son départ était nécessaire pour la continuation de sa carrière et l'affirmation de sa personnalité.

Ainsi, Vintilă Mihăilescu deviendra professeur universitaire au Département de Sociologie de l'École Nationale d'Études Politiques et Administratives (SNSPA) et coordinateur du Programme de Master en Anthropologie culturelle. Il a été *visiting professor* aux nombreux universités et centres d'études avancées de Canada, France, Italie, Suisse, Allemagne, Autriche, Bulgarie etc. En deux éditions, en 2007 et 2009, il publie un sorte de manuel d'anthropologie, docte et consistant, intitulé avec modestie « *Anthropologie. Cinq introductions* ». Voilà quelques fragments du premier introduction : « L'anthropologie peut être définie, de sorte générale, comme un discours sur l'unité de l'Homme dans la diversité de ses apparences

(biologiques, sociales, culturelles)... préoccupée de l'existence de l'Homme dans le monde, l'anthropologie a eu en permanence au centre la pensée des ressemblances par la description des différences... À quoi est-elle utile ?... En échouant comme un discours unificateur, l'anthropologie a gagné, d'autre part, une bonne connaissance des limites tant de *l'unité* que des *différences* du monde humain, en pouvant jouer ainsi avec une certaine compétence *le rôle d'arbitre* entre les prétentions totalisantes et les tentatives du spécificité qui sévit le monde... L'anthropologie a aussi un *potentiel pédagogique* : la pratique qui mine critique l'unité par différences et la différence par ressemblances... ça a certes valences herméneutiques et civiques... une telle pensée critique peut être réellement *un bon publique*. » (*op. cit.*, pp. 9–11)

Entre 2005–2010 il a été Directeur général du Musée du Paysan Roumain, une fonction et un rôle qui prouvait encore une fois son talent d'organisateur et conducteur accompagné d'une culture, recherches et travaux concernant le paysan roumain. En 1992 il signait, en collaboration, le volume « Paysans en histoire ». En 1996, il publie au volume « L'anthropologie en actualité et en perspective » le travail « La culture et l'agriculture. L'anthropologie de dé-coopérativisation ». Au 24-ème Colloque du Groupement des Anthropologistes de Langue Française (GALF) « L'Anthropologie au 21<sup>e</sup> siècle – projets et perspectives », en novembre 1999 à Sinaia (Roumanie), Vintilă Mihăilescu a présenté à la section « Anthropologie sociale et globalisation » le travail « Rationalité ou irrationalité du travail. Le monde rural face à l'économie de marché ».

Autres titres viennent s'ajouter aux travaux publiés (à son titre ou en collaboration, comme coordinateur), des travaux qui mettent en valeur ses recherches, ses idées, ses conceptions et sa vision sur la société roumaine et l'actualité socio-politique. Même les titres illustrent sa riche personnalité spirituelle et intellectuelle et aussi son talent d'écrivain :

- « Socio – ailleurs. Une autre sociologie de la transition » (*Socio – haihui. O altă sociologie a tranziției*), 2000,
- « Socio – ailleurs par l'Archipel Roumanie » (*Socio – haihui prin Arhipelagul România*), 2006,
- « Ethnographies urbaines. Le quotidien vu de près » (coordinateur), (*Etnografii urbane. Cotidianul văzut de aproape*), 2009,
- « La fin du jeu. La Roumanie de la vingtaine d'années » (*Sfârșitul jocului. România celor douăzeci de ani*), 2010,
- « Les layettes de la nation et les vêtements de l'empereur. Notes d'Anthropologie publique » (*Scutecele națiunii și hainele împăratului. Note de Antropologie publică*), 2013, en deux éditions,
- « La condition rome » (*Condiția romă*), coordinateur avec P. Matei, 2014,
- « L'apologie de l'échalier » (*Apologia pârléazului*), 2015,

« Hôtel Ambos Mundos. Un court essai d'anthropologie borgessienne » (*Hotel Ambos Mundos. Scurt eseu de antropologie borgesiană*), 2017,  
« Pourquoi c'est ainsi la Roumanie ? Les avatars de l'exceptionnalisme roumain » (*De ce este România astfel ? avatarurile excepționalismului românesc*), coordinateur, 2017,  
« Ethnogenèse et l'eau-de-vie (de prunes) » (*Etnogeneză și țuică*), 2018,  
« À la recherche du corps retrouvé. Une Ego – analyse de l'hôpital » (*În căutarea corpului regăsit. O ego-analiză a spitalului*). 2019.

C'est le dernier livre, avec un titre souvenant de Proust, un chant de cygne, écrit avec lucidité, un essai émouvant de compréhension de la vie, la maladie et la mort, un livre comme écrivait Aurora Liiceanu « *Ce livre qui s'adresse à tous, est écrit par quelqu'un qui a regardé fixement et obstiné dans les yeux de la vie et, se penchant élégant devant ses mystères, amène un hommage à la condition humaine.* »

Et au début du printemps 2020, à l'équinoxe, « *quand le soleil coupe l'équateur céleste et la durée du jour et de la nuit c'est égale* » et la pandémie de Coronavirus s'étendait dans le monde, Vintilă Miron Mihăilescu partira vers les Champs Verts ou, peut-être, parmi les étoiles, comme il écrit à la fin du son dernier livre : « *...Je me suis imaginé puis une sorte de quanta de mémoire : survivre, durer comme une poussière de quanta de mémoire qui traverse l'esprit d'un individu ou qui s'agrègent en idées qui sévissent les esprits des gens et puis se désagrègent, en flottant solitaires par la Voie Lactée du méta – espace psychique jusqu'à une autre agrégation ; et tout ça remplit le court temps de l'éternité humaine.* ».

**Eleonora Luca**





## BEYOND EXISTENTIAL SYNCOPATIONS: A COMMEMORATIVE ACCOLADE

GHEORGHÎĂ GEANĂ

In music, syncopation is the displacement of beats or accents by corresponding pauses. By a repeated alternation of such kind, syncopation organizes the flood of sounds in particular sequences of rhythm; in this way it brings about an expressive effect.

In parallel with music, life has its own moments of syncopation. Unlike their function in music, however, the syncopations in life might painfully break up the existential flow. In spite of this inconvenience, the counter-temporal structure seems to be the most adequate formal model for expressing the moments of someone's absence from a social framework when certain important events have occurred.

It is such a framework that I have in view in the following lines. In short, I want to adjust the lack of promptness in taking note of the passing away of four outstanding figures in the international arborescence of the socio-human sciences, particularly in anthropology. Irrespective of the reasons of absence in crucial moments – engagement in a fieldwork, other urgent research tasks, or simply the feeling of being overwhelmed by the turmoil of daily life –, *never is it too late to pay a homage*. Let us say a few words about each personality at stake.

\*

On 19 July 2016 Professor **Anthony D. Smith** left his family, disciples, colleagues, and friends; and he did this for ever...

Anthony Smith was born on 23 September 1939 in London. He began his high training by studying Classics at the University of Oxford. After a year at the Collège d'Europe in Bruges (Belgium) he moved on to London School of Economics in order to pursue a PhD on nationalism under the supervision of Ernest Gellner. His thesis – later published as a book: *Theories of Nationalism*



Photo 1. Anthony D. Smith  
(goodreads.com)

ANN. ROUM. ANTHROPOL., 57, P. 159–168, BUCHAREST, 2020

(1971) – proved to be a landmark: it contained a survey over the main ideas about nationalism until then and, at the same time, served as a stepping stone towards further achievements on the topic. With his own seventeen books and innumerable articles<sup>1</sup>, Anthony Smith was the most prolific among the scholars who wrote about ethnicity, nation, and nationalism. He made of this topic an interdisciplinary domain proper. In his writings and public rhetoric, nationalism appeared not only as a subject matter of a certain (e.g. political or ideological) interest, but as a phenomenon perfectly compatible with what Marcel Mauss called a “total social fact”. In other words, nationalism should be approached from as many perspectives as possible: historical, economical, psychological, religious, mythological, symbolical, artistical. According to John Hutchinson, one of his closest collaborators, “in later years [Smith] wrote compellingly on the contribution of painting (based on his second doctorate in art history) and music to national identity”<sup>2</sup>. The referentials in this case are *The Nation Made Real: Art and National Identity in Western Europe, 1600–1850* (printed in 2013), and *The Nation and Classical Music: From Händel to Copland* (with Matthew Riley, 2016). If life is short and art perennial – to quote the famous adage *Vita brevis, ars longa!* – then art conveys, by its mere perennality, the national ideals throughout history, projecting them (rhetorically speaking) into eternity. Painting and sculpture by the force of images and music by the force of sonority have a strong effect in mobilizing and uniting the masses. Every country has a national emblem and a national anthem as basic symbols. Smith exemplifies by *direct* messages taken from many works of painters and composers like Jacob van Ruisdael, Jacques-Louis David, Jean-Dominique Ingres, J.M.W. Turner, John Constable, respectively Chopin, Smetana, Shostakovich etc., but equally significant are the creations based on artistic *licence*. The action in Verdi’s *Aida*, e.g., takes place in ancient Egypt, but the Triumphal March filled with enthusiasm the hearts of Italians who were suffering under French occupation.

However, Professor Smith was not only an impressive author. A considerable number of his students became themselves outstanding specialists in the domain, but one could much learn from him by intellectual contacts with his person and writings; significantly, Steven Grosby confessed: “I was never Anthony’s pupil, but he was my teacher”<sup>3</sup>. Furthermore, the name of Anthony Smith is decisively

<sup>1</sup> Here are the titles of a few among his visionary books, besides the already mentioned *Theories of Nationalism* (1971): *Nationalism in the Twentieth Century* (1979), *The Ethnic Revival* (1981), *The Ethnic Origins of Nations* (1986 – cf. John Hutchinson: a “path-breaking book”), *Nations and Nationalism in a Global Era* (1995), *Myths and Memories of the Nation* (1999), *The Cultural Foundations of Nations* (2008), *Ethno-Symbolism and Nationalism* (2009) etc.

<sup>2</sup> John Hutchinson. 2016. “Professor Anthony D. Smith: an obituary”, in: *Nations and Nationalism*, 22 (4), p. 622.

<sup>3</sup> Steven Grosby. 2018. “Nationality and religion”, in: *Nations and Nationalism*, 24 (2), p. 258.

related to the founding – immediately after the astral year 1989 – of two leading institutions in the study of the complex phenomenon of nation: Association for the Study of Ethnicity and Nationalism (ASEN) and the affiliated journal *Nations and Nationalism* (doubled by *Studies in Ethnicity and Nationalism*). No doubt, it is due to Professor Smith's prestige that "LSE became (in Walker Connor's words) 'the Mecca' for the teaching of and research into nationalism"<sup>4</sup>.

One of the most challenging problems in this context was the stance of Anthony Smith towards the polarisation modernism–primordialism. Once again, the character in case staked equally on generosity and complexity. As a PhD student of Ernest Gellner – the inflexible leader of the modernism –, Smith accepted his master's idea about the role of capitalist industrialization in consolidating nationalism, but he kept his own view regarding the origins of national feeling in ancient times. At this point it is perhaps worth considering the interpretation that: "The essential distinction becomes that between the *form* of the nation and its *content*. While the form of a nation may be of a recent age, its content may hardly be distinguished on the horizon of history. What happened in the modern epoch may be validated as a *formal* victory, but not as an *essential* transformation"<sup>5</sup>.

However, it is not so much for controversial aspects as for the impact of his thinking that Anthony D. Smith will remain from now on in the field of nation and nationalism studies a real *spiritus rector*<sup>6</sup>.

<sup>4</sup> John Hutchinson, quoted art., p. 623.

<sup>5</sup> Dan Dungaciu. 1995. "Anthony Smith și perspectiva primordialistă asupra națiunii" [Anthony Smith and the primordialist perspective on nation], subchapter in: Ilie Bădescu and Dan Dungaciu (eds), *Sociologia și geopolitica frontierei* [Sociology and Geopolitics of the Frontier], Bucharest, Editura Floarea Albastră, vol. I. pp. 187–195 (quoted from p. 192; italics in orig.).

<sup>6</sup> More branched out details about the scholar's life and work may be found especially in the journal *Nations and Nationalism*, 24 (2), 2018, where two sections are dedicated to him: "Anthony D. Smith and the Study of Nationalism" (with articles by Eric Kaufmann, Ann Rigney, Steven Grosby, and Natividad Gutierrez) and "Round Table Symposium on Anthony D. Smith" (with contributions by John Hutchinson, Jonathan Hearn, Siniša Malešević, Susan-Mary Grant, and Benedikte Brincker & Athena S. Leoussi). Particularly challenging is the tentative of Natividad Gutierrez to explain the nation-building in Latin America by resorting to indigenous myths. In the case of Mexico, the genesis of the nation is viewed through the agency of the gender myth, namely: by the union between the male European conqueror and female matricial indigenusness. This story is amazingly similar to that one advanced in 1923 by the Romanian archaeologist Vasile Pârvan. Based on the real historical fact of the genesis of Romanian people as a result of the Romans' conquest of ancient Dacia, Pârvan imagined (in a genuine poem in prose) a frantic love story between a masculinized Rome – under the emblematic name Romul (Romulus being the mythical founder of Rome) – and Dacia, a fierce virgin in the Carpathian Mountains. A love from which the Romanian people was born!... (see the details – including the English version of the poetical text – in Gheorghică Geană. 2018. "The history of Romanians as apokatastasis", in: *Annuaire Roumain d'Anthropologie*, 55, pp. 23–43).

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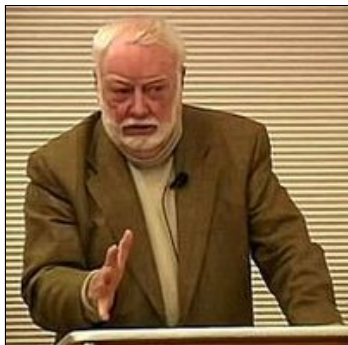


Photo 2: Walker Connor  
(goodreads.com)

An outstanding member of the spiritual family of scholars who devoted their energy to the understanding of nations and nationalism but moved to a better world was **Walker Connor** (19 June 1926 – 28 February 2017). Although his editorial production was not quantitatively impressive<sup>7</sup>, Connor was the American hard bridge-head of the nationalistic studies that have flourished in Europe since the last two decades of the 20th century.

By the way, the assertion made by one of his followers (and generally shared) that: “The date normally set for when the study of nationalism began is 1983”<sup>8</sup> should be taken *cum grano salis*.

As a matter of fact, national ideal waved through Europe after the French Revolution so that the 19th century remained in history as the “century of nationalities”. Ernest Renan delivered his celebrated oration harangue *Qu'est-ce qu'une nation?* in 1882. Moreover, the mid-19th century was the moment when the great trend of *Völkerpsychologie* entered the scene following the contributions of such figures as Moritz Lazarus, Heymann Steinthal, and Wilhelm Wundt in Germany but with a long historical echo in the western social thinking (see Egbert Klautke. 2013. *The Mind of the Nation: Völkerpsychologie in Germany, 1851–1955*, Oxford / New York: Berghahn Books). To the same effect, Wilhelm von Humboldt coined the term “*Nationalcharakter*”. Later on, after the World War II, an interest in the study of “national character” appeared in American anthropology under the representation of Ruth Benedict, Margaret Mead, and Geoffrey Gorer. Also, a continuous line of thought about ethnicity, nation, and nationalism developed in Romanian modern history; closely connected to the West European movement of ideas, it nevertheless designedly reflected the historical destiny of Romanians – thus, in the 19th century Eminescu assimilated the writings of Lazarus and Steinthal, and in the first half of the 20th century Simion Mehedinți pleaded for “ethnopedagogy”, Constantin Rădulescu-Motru for “Romanianism” as an application of what he called “energetical personalism”, and Dimitrie Gusti for “sociology as a science of the nation”.

<sup>7</sup> Principally, Walker Connor asserted himself by a series of articles and two books: *The National Question in Marxist-Leninist Theory and Strategy* (1984), and *Ethnonationalism: The Quest for Understanding* (1994).

<sup>8</sup> Daniele Conversi. 2018. “Introduction: why a state is not a nation – and whether economics really matters. Walker Connor 50 years on”, in: *Nations and Nationalism*, 24 (3), p. 497 (the whole article: pp. 497–505). The invoked argument lies in the almost simultaneous appearance of three influential books: *Imagined Communities: Reflections on the Origin and Spread of Nationalism* (by Benedict Anderson), *Nations and Nationalism* (by Ernest Gellner), and *The Invention of Tradition* (by Eric Hobsbawm & Terence Ranger, eds).

It is true, however, that at the beginning of 1980s the works of Anderson, Gellner, and Hobsbawm/Ranger stimulated the theoretical elaborations on this topic to a great extent.

Walker Connor's place in the movement of ideas around the concepts of nation and nationalism is referential. Connor expressed his dissatisfaction regarding what he called "terminological chaos"<sup>9</sup>. He pointed out the frequent confusions in using such couple of terms as nation and state, nationalism and patriotism, or popular sovereignty and ethnicity. Both in the written texts and in teaching activity as Professor of Political Science (at Trinity College, Hartford, Connecticut and at Middlebury College in Vermont), Connor's contribution consisted first in installing order in the core of the conceptual constellation related to ethnicity and nation; this led to his characterization as "the champion of academic clarity"<sup>10</sup> (see the here enclosed photo, where Connor seems to "part the waters"! ). An outlook on his principal ideas was offered by Daniele Conversi on the occasion of the "Walker Connor Symposium"<sup>11</sup>: "For Connor, a nation is not a state, but a politicised and mobilised ethnic group. Consequently, he did not take too seriously the notion of 'civic nationalism'. And, since all forms of nationalism are intrinsically ethnic, he preferred to use the umbrella term 'ethnonationalism'. If civic nationalism was possible, it should be called 'patriotism', i.e. attachment or loyalty to civic institutions that ideally represented the entire citizenry, rather than a specific ethnic group, particularly the dominant one"<sup>12</sup>. Connor used to invite his friends and colleagues – from the proximity or from afar – to clear up such notions<sup>13</sup>.

Within the close circle of friends people spoke amusingly about Connor's humour. Humour is a proof of intelligence and from the playful spirit of this scholar fermented, *inter alia*, the idea of cutting the "R" in the formula "Man is a Rational Animal" and putting *over* (i.e. not simply instead of) it "N"!... And this is not a wanton joke: the outcome (obviously: "Man is a National Animal") is the assertion of something profound in the *ethnosocial* essence of human being!...

<sup>9</sup> This is the title of the Chapter Four of the volume *Ethnonationalism: The Quest for Understanding* (Princeton, N.J.: Princeton University Press, 1994).

<sup>10</sup> Uriel Abulof. 2018. "Nationalism as legitimization: the appeal of ethnicity and the plea for popular sovereignty", in: *Nations and Nationalism*, 24 (3), p. 528 (the whole article: pp. 528–534).

<sup>11</sup> See *Nations and Nationalism*, 24 (3), 2018, pp. 497–545, with articles by Daniele Conversi, Paschalis M. Kitromilides, John Stone & Ioanna Christodoulaki, Stuart J. Kaufman, Uriel Abulof, and John McGarry.

<sup>12</sup> Daniele Conversi, quoted art., here *supra*, note 8, p. 499.

<sup>13</sup> In 1996, I was personally excited about receiving *Ethnonationalism* from the author with this dedication: "To Gheorghîță Geană, Colleague in 'the quest for understanding'. Walker Connor".

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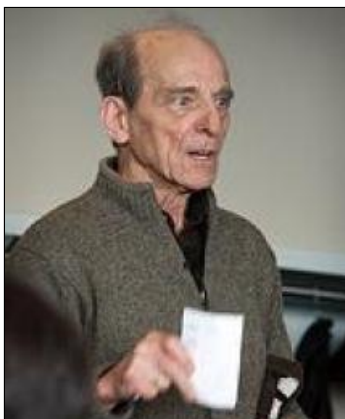


Photo 3: Jan Vansina  
(Photo: Catherine A. Reiland /  
African Studies Program  
University of Wisconsin-Madison.  
Used by permission)

In the two cases mentioned above, the prefix “ethno-” has been used in relation to nation and nationalism. Let us change the referential horizon and turn towards ethnology, and more exactly towards *ethnohistory*. It was **Jan Vansina** (14 September 1929 – 8 February 2017) who used this prefix in such a context.

Jan Vansina was Belgian by birth. He was born in Anvers (Antwerpen in Flemish), a city which he kept permanently in his heart. He studied history and law at the University of Leuven, where he also delivered his dissertation for getting the doctorate in Philosophy and Letters, in 1957, with the thesis “The Historical Value of Oral Tradition: Application to Kuba History”. In the meantime, however, he had passed one academic year (1951–1952) at the University College of London, where the passion for anthropology had touched him with its discreet wing<sup>14</sup>.

In a long career dedicated to anthropology, Jan Vansina distinguished himself as an outstanding *Africanist* and, also, as *ethnohistorian*. These two epistemological profiles are equally appreciable – the possible emphasis depends upon the interest in approaching them. As an Africanist he was a pioneer *sui generis*. The task he assumed was to prove the inconsistency of the general suspicion that people without writing (the Africans covering only a part of this category) could not have history. In pursuing his aim the scholar invested tenacity and erudition, so that the books he published<sup>15</sup> make up in themselves an encyclopaedia of African civilization, art, and – of course – history. About his work with the natives of Kuba (and not only of that Congolese village where his fieldwork began), it was said: “Learning their language and participating in the boys’ initiation allowed him to become a deeply involved participant observer. He worked on the current anthropological themes of the day and, more importantly, he also collected oral material for an innovative historiography that would later inspire hundreds of students and researchers”<sup>16</sup>.

<sup>14</sup> According to his own confession, this happened through the agency of professorship of Darill Forde, Mary Douglas, Michael Smith, and Phyllis Kaberry (cf. Neil L. Whitehead. 1995. “An interview with Jan Vansina”, in: *Ethnohistory*, 42 (2), pp. 303–316; the information at stake: p. 305).

<sup>15</sup> Among them: *Oral Tradition* (1965; reworked and republished in 1985 under the title *Oral Tradition as History*), *Kingdoms of the Savanna* (1966), *Paths in the Rainforests* (1990), *Living with Africa* (1994), *Antecedents to Modern Rwanda* (2004), *Being Colonized: The Kuba Experience in Rural Congo, 1880–1960* (2010), *Through the Day, Through the Night: A Flemish Belgian Boyhood and World War II* (2014).

<sup>16</sup> Hein Vanhee. 2019. “‘This guy has become a complete savage’. A last interview with Jan Vansina”, in: *African Studies Quarterly*, 18 (2), p. 1.

Nevertheless, as Africanist, Vansina's weight has rather a regional determination. Perhaps this is the reason for which he said: "I am not an ethnologist, I am a historian!" – After all he was both. Comparatively, as ethnohistorian his importance aims at the Absolute of the sky of theory. From this viewpoint, while the reaction of Franz Boas against unilineal evolutionism had been characterized as "historism", the style of thinking promoted by Jan Vansina might receive the label of "neohistorism". Boas had had in view the availability of any culture to be subjected to chronological becoming; Vansina had in view the availability of oral tradition as a source of historical revelation. In this respect, *Oral Tradition* – subtitled *A Study in Historical Methodology* (Chicago: Aldine, 1965; Fr. orig. ed.: 1961) – was an emblematic work, together with its revised version, *Oral Tradition as History* (Madison: University of Wisconsin Press, 1985).

This methodology is equally applicable to the body of oral tradition which is part of a complex (including written) culture. This is the case of Romanian oral tradition too, which conserved in the collective memory facts, events, names; such "survivals" – to use an anthropological term – subsisted *ab illo tempore* and found out their utterance in folk stories, legends, rituals, proverbs, imaginary visions, etc. For example: the name of the Roman emperor Trajan, co-founder with the Dacian king Decebal of the ancient Dacian-Roman state, is mentioned in the New Year carols; also, at the Last Judgment, the Moldavian voivode Stephen the Great is imagined standing next to Our Saviour in order to help Him assign justice; another great voivode, Michael the Brave (famous for his courage in the fights against the Turks, as well as for unifying in 1600 – even if for a short time – Wallachia, Transylvania, and Moldavia into a single state) is mentioned in children's games, when raining: "Run away, pelting rain, otherwise upon a word, / I'll cut your stream with Michael's sword!..."<sup>17</sup>; on the same illustrative line, other examples can be detected in the common language: about a person who runs fearfully one says that "he/she flees as if the Turks are overrunning". In modern times, such values resonated largely at the level of written culture. It is just by exploring such sources that Gheorghe I. Brătianu could have written a book like *Tradiția istorică despre întemeierea statelor românești* (1945) [Historical Tradition about the Founding of Romanian States], București: Monitorul Oficial și Imprimeriile Statului, Imprimeria Națională.

Remarkable in itself, historical methodology proves its value once more by comparison with synchronic approaches. Vansina pointed out<sup>18</sup> two "types of building blocks" in the construction of anthropological theory: one is the "ethnographic monograph" of synchronic perspective, like a descriptive grammar; the other is the "historical monograph", which describes the evolution of a culture.

<sup>17</sup> In Romanian orig.: "Fugi, ploaie, că te tai, / Cu sabia lui Mihai!" (my Engl. trans. in text – G.G.).

<sup>18</sup> Cf. Jan Vansina. 1973. "Culture through time", in: Raoul Naroll and Ronald Cohen (eds), *A Handbook of Method in Cultural Anthropology*. New York & London: Columbia University Press, pp. 165–179.

The two can be regarded as complementary, given that historical monographs serve as diachronic models and are thus of critical importance in theoretical anthropology.

Jan Vansina's abnegation was symbolic for the meaning of the anthropological profession. At his retirement in 1994 he wrote: "Ultimately, the study of African history becomes for me a meditation on the African incarnations of the grandeur and misery of the human condition itself"<sup>19</sup>.

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The last component of this "farewell" quartet (if an association with Haydn's universe is allowed) was **Arne Martin Klausen** (19 December 1927 – 15 June 2018). With his well-groomed beard, serene eyes and charismatic figure, Arne Martin looked like a wise Viking. It is possible for him to have had in his genealogy some Viking roots, but he was certainly a wise anthropologist!... – He was Professor of Social Anthropology at the University of Oslo, as well as Director of the Museum of Anthropology in the same city.

A trustworthy voice insisted on "the untypical situation of Norwegian anthropology"<sup>20</sup>. The author of these words (a Norwegian himself) was referring to the involvement of anthropology into public affairs and interpreted this distinction mainly on the account of the higher system of education in Norway, where anthropological knowledge is largely represented at all levels of training. In the same sense it was argued that anthropology is in its milieu in a small country where "everyone feels themselves to have some kind of personal stake in national development"<sup>21</sup>.

This context made of Arne Martin Klausen a typical representative of that untypical Norwegian anthropology. As Eriksen – himself an outstanding figure of

<sup>19</sup> Jan Vansina. 1994. *Living with Africa*. Madison: University of Wisconsin Press, p. 254.

<sup>20</sup> Thomas Hylland Eriksen. 2008. "The otherness of Norwegian anthropology", in: Aleksandar Bošković (ed.), *Other People's Anthropologies: Ethnographic Practice on the Margins*, p. 171 (the full chapter: 169–185). New York & Oxford: Berghahn Books.

<sup>21</sup> Signe Howell. 2010. "Norwegian academic anthropologists in public spaces", in: *Current Anthropology*, vol. 51, supplement 2, pp. 269–277 (quotation: p. 275). While both Eriksen and Howell should be taken for granted in their assumptions, the popularity of anthropology in mass media from Norway is still more profoundly understandable by the sociocultural values contained in the creations of Ibsen and Munch. I am referring to the engagement of people in such problems as the public good, national dignity, family, woman's condition etc. – these (not always simple) aspects of the so-called "civic consciousness" are present in Ibsen's plays. As to Edvard Munch, it is significant how differently he treated his personal psychic state of anxiety (which led him to expressionist representations like *Ashes, Love and Pain, Separation*, or especially *The Scream*) as against the deep sentiment of tradition and tonic responsibility he invested in the great frescoes (*History, The Sun*, and *Alma Mater*) with which he decorated the Aula Magna at the University of Oslo.



this trend – remarked: “we were lucky to have individuals like Gjessing, Barth, and Klausen, who went out of their way to engage a larger public”<sup>22</sup>. By its cross-cultural openness, anthropology served to Professor Klausen as the most adequate framework for combining his personal feeling with Norway’s interests abroad. Thus he was a member of the Peace Research Institute of Oslo (PRIO), a group founded in 1959 for research on the peaceful relations among states and human groups. Also, until retirement, he was the governmental representative in the Norwegian National Commission for UNESCO<sup>23</sup>.

However, perhaps the loyal engagement in the native space explains why Arne Martin Klausen wrote much more in Norwegian than in foreign languages. That is a pity, because his works in English and French benefitted from favourable comments.

Thus, the book he edited in France, *Le savoir-être norvégien*, was consistently reviewed in the prestigious journal *L’Homme*<sup>24</sup>. The ten chapters of the volume were conceived as a set of socio-anthropological interpretations of “Norway viewed by Norwegians”. In his “Introduction”, Klausen looked at the “self-sufficiency” of Norwegians, who – as against Americans and Europeans – do not wonder about the stratification of their society. Generally, the Norwegian anthropology followed the British sociologist line, but this book is imbued with the idea of “national character” cultivated in American anthropology.

A real interest was also aroused by the volume *Olympic Games as Performance and Public Event*. The story of this book<sup>25</sup> is related just to the one published in France. Under the imminence of Winter Olympic Games at Lillehammer in February 1994, and as a consequence of the success with *Le savoir-être norvégien*, Professor Klausen was invited: first to deliver a conference and then to elaborate a research project with the theme “Olympic Games and culture”. The scholar embraced the proposals – especially the idea of research – as great challenges, both for the autochthonous Norwegian ethos and the universalistic Olympism. But not less for anthropology<sup>26</sup>!... In April 1995, after a little more than one year since the Olympic Games, Professor Klausen closed a conference at Lillehammer Hotel with these words: “In a paradoxical way, the winter games at Lillehammer became an occasion for revitalizing Norwegian traditional identity and its symbolic expressions, and at the same time an arena for demonstrating our modernity. And as always, we did it our way!” (typewritten text).

<sup>22</sup> Thomas Hylland Eriksen, quoted ch., p. 184. Besides Arne Martin Klausen, the other two full (and prestigious) names are Gutorm Gjessing and Fredrik Barth.

<sup>23</sup> From this position he elaborated an emblematic UNESCO document of applied anthropology in five chapters and an Appendix: Arne Martin Klausen. January 1995. *Socio-Cultural Factors in Development Assistance*. Oslo: The Norwegian National Committee of the World Decade for Cultural Development, 34 pp. – in imperial octavo.

<sup>24</sup> Arne Martin Klausen (s. dir.). 1991. *Le savoir-être norvégien. Regards anthropologiques sur la culture norvégienne*. Préface de Gabriel Gosselin, Paris, L’Harmattan. The review appeared in *L’Homme*, No. 132, 1994, pp. 178–179, under the signature of Guy Tassin.

<sup>25</sup> In all details: Arne Martin Klausen (ed.). 1999. *Olympic Games as Performance and Public Event. The Case of the XVII Winter Olympic Games in Norway*. New York & Oxford: Berghahn Books.

<sup>26</sup> The research was carried out mainly by a team of native anthropologists led by Professor Klausen, in accordance with the typical methodology based on fieldwork.

Nevertheless, in the vast topic area of anthropology Arne Martin chose (or had been chosen?) to deal mainly with art. It is a real pity that his *Kunstsosiologi* (printed by Gyldendal Norsk Forlag, Oslo, 1977) has not been translated<sup>27</sup>... He also presented artists and wrote about them, held a gallery in the Vesterøy island near his current dwelling, and – as being himself a “chosen one” – spent his free time painting (particularly landscapes).

At this point, two personal recollections spur me. In September 1976, Professor Arne Martin Klausen visited Romania. On that opportunity he lectured at the Centre of Anthropological Research<sup>28</sup> on the history and state of things with anthropology in Norway. In those days I guided him through Bucharest. When visiting the National Museum of Art, he stopped in front of the picture (absolutely new for him) *Anemones*, by Ștefan Luchian, and exclaimed: “This is a masterpiece!”. I reflected amazingly: “This is what a real professional looks like!”<sup>29</sup>.

The second memory: in June 1994 I travelled to Norway for attending the EASA Conference in Oslo. Arne Martin invited me to reach there a few days before the event. I felt honoured and he hosted me in his cottage, in the Vesterøy island. There and then, I understood that, as a matter of fact, for my distinguished host art was a familial milieu: the house was full with his paintings, the sculptures of his wife, Liv, and the textiles of their daughter, Bente. But above all I understood that in Arne Martin Klausen’s life the love for art and the art of friendship formed a rare symbiosis.

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How could one find a better end of this accolade than by pointing out as common traits of these scholars their human qualities: professionalism and generosity. Perhaps in the course of life, our scientific status of individuals making use of critical reason prevented us from telling them the special place they had in our heart. However, irrespective of our sentiments, they rose the knowing of human being up to love... And now let us imagine them as listening to the music of spheres!...

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<sup>27</sup> Never is it too late to do it!... Let us glean from a review: “The author of this book on ‘The Sociology of Art’, Arne Martin Klausen, is professor of social anthropology at the University of Oslo, Norway. Not of aesthetics or philosophy, of the visual arts, literature, music or the like – and not of sociology, either. Professor Klausen is an amateur of art, in the original sense of the word: a lover of art (especially the visual arts). This ‘amateurism’ permeates the book in a very agreeable way and combines charmingly with his extremely straightforward style” (Søren Kjørup, in: *Acta Sociologica*, vol. 22, issue 1, 1979, p. 81; the whole review: pp. 81–84).

<sup>28</sup> Today “F. I. Rainer” Anthropology Institute of the Romanian Academy, Bucharest.

<sup>29</sup> Ștefan Luchian (1868–1916) was a classic of Romanian painting who combined in his art traditionalism and modernism. He completed his education in München and Paris. After 1900 a sclerosis made him paint with the brush tied to the hand. Some specialists appreciated him as one of the greatest painters of flowers in European art. *Anemones* (dated 1908) impresses through the chromatic warmth and harmony of the flowers (*Anemone nemorosa*), which are represented by Luchian in an earthen pot.

**Ion H. Ciubotaru, Silvia Ciubotaru, *Basme fantastice din Moldova* [Fantastic Folktales from Moldavia], “Alexandru Ioan Cuza” Publisher, Iași, 2018, 715 pp.**

As originated into an early 1990s project of the Iași Department of Romanian Academy and the Academy of Sciences from the Republic of Moldova, namely the *Ethno-folkloric treasure of Moldova*, the present volume consists of a selection of 112 folktales that the authors collected from almost 700 village communities in Moldavia only (with the rest of such documents recorded in Bessarabia but remained in the custody of a local research institute). Professor Ion H. Ciubotaru and Dr. Silvia Ciubotaru (both of them, experienced and well-known researchers of the “Alexandru Philippide” Institute of Romanian Philology in Iași) do contextualize their folktale corpus under the inquiry principles of a *General Folkloric and Ethnographic Questionnaire*, within which the issues of literary folklore and folk prose are integrated into a broader research themes including rituals of family life, folk crafts, medicine, and beliefs, peasant costumes and architecture, and so on. The folktales published in the current work become from a number of 62 folk narrators that are considered to be representative for the eight counties of Moldavia (pp. 5–7).

In their ample “Introductory study” (pp. 9–160), the authors make a comprehensive bibliographic excursus on the historical origins and diffusion of what they call “fantastic [folk] narratives” in Moldova, beginning with historical legends and fairy tales mentioned by Middle-Age chroniclers Grigore Ureche, Miron Costin, Ioan Neculce, as well as by the Illuminist scholar Dimitrie Cantemir (pp. 9–13). Important information is provided on the work of the first folktale gatherers in Moldavia (such as Ion G. Sbiera and Simion Florea Marian, in the 1880–1890s) (pp. 16–21), and the classical writers Mihai Eminescu and Ion Creangă (with their several contributions in the field of fantastic folktales as well) (pp. 21–26). Further resources for the history of folktale discovery and publishing in Moldova are found in the questionnaires applied by the philologist Bogdan P. Hasdeu (1877, 1884) and the historian Nicolae Densușianu (1893–1896), in the comparative study of Romanian folktales by the philologist Lazăr Șăineanu (1985), as well as in the work of folklorists like Theodor D. Speranția (1887) and Elena Niculiță-Voronca (1903) (pp. 28–40). In the first decades of the twentieth century, this literature is considerably enriched with the works of a remarkable series of folklorists and ethnographers including Tudor Pamfile, Artur Gorovei, Petru Gh. Savin, Dumitru Furtună, Leca Morariu, Mira Cedru (Bukovina), Simion T. Kirileanu, V. Moiescu, Petre V. Ștefănuță (Bessarabia) and Tatiana Gălușcă-Cârșmariu (Bessarabia) (pp. 63–43). The same synthesis also benefits of folktales published by the eminent Romanian historian Nicolae Iorga (in Paris, 1924), or collected in the framework of monographic works conducted by the Bucharest School of rural sociology (Ion C. Cazan, 1939) (pp. 54–56). The Moldavian folktale bibliography was developed in the post-war period thanks to the collections of Ovidiu Bârlea (1966), Grigore G. Botezatu (in Bessarabia, 1967), and Ion Diaconu (1980); it still continue to grow in recent times, with the works of Mihai Alexandru Canciovici (1995), Ion Oprișan (2002–2009) (pp. 63–74). Authors of such collections are also reported for Moldavians that live in areas from East Dniester, Bug and Northern Caucasus (Grigore Botezatu, Mariana Cocieru, 2009) (pp. 76–78).



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The series of the 62 folktale narrators is provided (pp. 79–106) with plenty of details on their age (mostly between 40 and 87 old), residence and biographic context of enculturation, photographs, etc. Speaking of the oral-tradition representativeness of their interlocutors, the authors remark that such “gifted persons” could not be associated with any generic (actually, inexistent) “village’s old man”, one who would have been “wiser and more inventive” than all the members of his community (p. 108). Even when related sometimes (p. 93) to the presence of a *liportér* (“reporter”), or perhaps just due to such local understanding of ethnographic work, I. H. Ciubotaru and S. Ciubotaru argue on their need of “replacing local audience” (that is, the usual community context of performing folktales, made of traditional reunions of *clăci* and *șezători*, as well as Christian anniversary ceremonials) with an “augmented attention” and “affective participation”, from their own side, towards folk narrativity (pp. 108–110). As the authors outline it, “Narration [...] for these peasants [...] is a cultural act [...] [through which] the world is managed just like one’s own household. What is miraculous, astonishing, extraordinary, never seen [...] is an impulse to the enlargement and perfection of the frontiers of universe and the human spirit.” (p. 113). In terms of folktale repertory, the authors review several themes ones of which evoking ethnographic realities (pre-nuptial customs, art of fiddlers...) or historical characters and events (the Moldavian fifteenth-century voivode Stephen the Great, Great-War battle from Mărășești...), while others revealing magic traits (new-born metamorphoses, soul sheltering out of one’s body, oracular animals...) (pp. 113–119).

The authors also proceed to meticulous analysis of the “Universe of [folktale] narrations”, by referring first to “initiatory formulae” of introducing the audience into the story atmosphere (with alternance of spatial and temporal areas, as well as of veridic and fantastic details); “intermediate” and “final” formulae are mentioned as well (with their roles of keeping listeners “in touch”, of eulogizing audience for its attention, etc.) (pp. 119–125). As regards the “Fantastic imaginary and its mythological ground”, the authors are interested in identifying into folktales “rudiments” of ancient rites and myths, by highlighting the presence in Moldovan narrativity of classical themes such as birth as a miraculous survival (Perseus, Moses...), dendrological origin of people, animal-human metamorphoses, heroes’ voyages to mysterious realms, “genealogical” conflicts between youngest and older brothers, fabulous bestiary including dragons but also horses of supernatural “capabilities”, etc. A particular emphasis is put on the relation between the “real and miraculous”, with the folk perception of the “fantastic” as something “would be”, rather than to be an “impossible” or absurd “matter”. Variability of time elapsing (depending on the “tempo” of folktale scenario) as well as the interweaving of “mundane” and fantastic toponymy – are evidences of this “continuum” between two “worlds”, one of which – the folk culture – being generative for another one – the folktale imagery – that echoes many traits of the “real” world; further elements of such dialectic may be encountered in the folktale information on customary medicine, funerary rituals, and so on (pp. 144–152). “Ethical aspects” (the “right combat”, hospitality, trespassing foreign territories, brothers’ disputes, etc.) and some “Elements of artistic language” (symbolic numbers of realms or heroes, “brightness” and beauty in descriptions of positive characters, onomatopoeic and syntagmatic means of storytelling, etc.) – make an important stylistic supplement to the “universe” of folktale narrativity (pp. 152–160).

The Moldavian folktale corpus (pp. 163–697) is referred to the Aarne-Thompson Index (AT), with each of the 112 texts being assigned a certain folktale type (e.g.: *Zorilă Făt-Frumos*, AT 301). Some tales may correspond to several such types (*Mreanî Voinicu*, AT 302 + AT 560 + AT 318; *Copiii lăsați în pădure*, AT 315 + AT 300; *Fata cu steluți-n frunți*, AT 706 + AT 510 B + AT 712, etc.) Beyond typological technicalities, I. H. Ciubotaru & S. Ciubotaru’s tale collection is especially remarkable in its vernacular *mise en page*, which practically reproduces not only one or another motif, or “type”, but also the very folk pronunciation of interlocutors: *O fată di-mparat o născut on copil, parti bărbătească* (*Făt-Frumos din câmpu cu florili*, AT 314, p. 299), *Iera un baiet. Da baietu știé mai multe linghi* (*Clăili Împăratului*, AT 314, p. 302), *Iera odata-on om ș-o fimeie, ca tăț oameni, trăieiu într-on sătuc oaricari* (*Hurmuzachi și leul*, AT 400 + AT 518, p. 353), etc. While this characteristic may happen to slow following the narrative course in modern Romanian language, it also proves the impressive effort of the authors of transcribing their records in accordance with the contemporary Moldavian phonetics and vocabulary. Such an effort is itself an account for the manner

in which authenticity in folkloristic domain is to be approached and preserved in the process of publicizing today traditional narrative documents.

The volume ends with a wide-ranging “Thematic Index” in which the fairy-evocative folktale heroes (*Arghiri Crăişor, Făt-Frumos cu cartea în mână, Ileana Sânziana, Ruja Rujalina, Sfârmi Chiătră, Sfânta Duminić, Strâmbă-Lemni, Tei-leaganăt, Zâna Zânilor...*) are accompanied by equally “fantastic” beings and creatures (*Baba Cloanța, Balauru din iaz, Muma Padurii, Păsărea cu peni scrisă, Păștili cu solzi de aur, Știma Padurii, Talpa Iadului, Ucigăla-Crăcea, Zmeul din prăpastie...*), toponyms (*Biserica de Tămăie, Crângul Zmeului, Dealul Chețrăriei, Lacu Sâmbitilor, Muntii de Sticlă, Ostroavili mărilor...*) and innumerable “common nouns” bearing fabulous and mysterious meanings (*cutiut de aur, cârji de oțel, floarea morții, harămnice de foc, pahar cu apă vie, poloboăci cu bani...*) (pp. 699–708).

In its outstanding amplitude and content, the volume is (at the same time) an authorized bibliographic review, an erudite theoretical essay, and a broadly-encompassing anthology of regional folktale literature; all these attributes are result of a long-term authors’ engagement with collecting tale narrations (first of which in 1968, out of a series that was to continue almost without interruption, year after year, until 1988, with additional contributions from 1995 to 1999). This chronological framework is important in understanding the intellectual biography of I. H. Ciubotaru and S. Ciubotaru, but mostly in terms of the temporal framing of the folktales under discussion, as a folkloric category. The authors point to the “seriousness” with which folktales are lived among Moldavian peasants since the 1970s–1980s (p. 7), while stressing (p. 78) the intergenerational transmission – starting from one’s early childhood – of such traditional texts. Professor Ion H. Ciubotaru and Dr. Silvia Ciubotaru generously endow Romanian ethnology with a book that, while dealing with legendary or mythological stories from “once upon the time”, simultaneously witnesses (and makes proof of) certain historical circumstances in the development of Moldavian peasantry; as seen before, the folktale vernacular lexicon and “evidences” on the ethnography and history of this Romanian province might be taken into such a “contextualizing” account.

**Marin Constantin**

